

# JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

THIRD SERIES

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*Elevation of Throne End of House.*

*Side of Throne.*

The Throne end of the House of Lords, by Sir Charles Barry. One of the drawings lent by Mr. Caryl Barry [A.] for exhibition at the Inaugural Meeting. This drawing, which seems to show A. N. W. Pugin's draughtsmanship, has remained with the others exhibited in the Barry office from Sir Charles' time until to-day.

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# JOURNAL OF THE ROYAL INSTITUTE *of* BRITISH ARCHITECTS

VOL. 15. 3RD SERIES

22 NOVEMBER 1937

No. 2

## Journal

MR. C. H. JAMES, A.R.A.

Mr. C. H. James [F.] has been elected an Associate of the Royal Academy.

### THE CATALOGUE

The first copies of the catalogue are now ready, and all those who have ordered copies will have theirs sent to them soon—as soon as we receive the money due for the catalogue and postage. Invoices are now being sent out. The leaflet announcing the catalogue is issued again with this JOURNAL. (It was not issued in the last number, despite the statement in the JOURNAL that it was there.) On Monday, 22 November, the date of publication of this JOURNAL, Sir Banister Fletcher will be presented with a specially bound copy at the Council Dinner Club's dinner before the reading of Mr. Morreau's paper.

### CHILDREN'S CHRISTMAS LECTURES

The eleventh series of Christmas Holiday Lectures to boys and girls will be given this session by Mr. G. A. Jellicoe [F.]. The general subject of the three lectures will be the English countryside. In the first Mr. Jellicoe will talk about the spiritual effects of landscape, of present standards of beauty and ugliness and of the growth of the English countryside as a logical development and the causes of spoliation. This first lecture will be on the countryside to-day, the second will be on the countryside in the past and will show how agricultural history, the systems of farming and land ownership have modified the face of the country. Past and present having been dealt with, Mr. Jellicoe in his last lecture will talk about the future: again an analysis of causes, why changes are certain to come from the development of new activities, the effect of mining, the effect of transport, the unification of national

interests which turns *local* countryside into *national* countryside, and then at last Mr. Jellicoe's visions of a future England.

As in previous years it is necessary to remind members that these lectures are for *children*. The attractions of such a syllabus are enough to fill the hall with adults, but that is not what is wanted. Past experience has shown that applications are received for many more tickets than we can possibly issue, though it has also been our experience that quite a number of people ask for tickets which they do not use. Members who want tickets for their children are asked to remember to write soon and not to ask for more than they are certain to use. The dates of the three lectures are: Wednesday, 29 December; Friday, 31 December, and Monday, 3 January, all at 3.30 p.m. The lectures are free.

### RURAL HOUSING

The report on Rural Housing, which has been issued by a Sub-Committee of the Central Housing Advisory Committee, is an important and stimulating document. The most notable conclusion that the Sub-Committee have reached after deliberations lasting from 30 January 1936 until this October is that the rent of agricultural workers' houses must be subsidised sufficiently "to enable a large proportion of the houses to be erected at a rent not exceeding 3s. a week exclusive of rates." Such a subsidy should be made to apply to private enterprise built houses on condition that their rents do not exceed those fixed for the area by the Agricultural Wages Board. In the words of the report, "witnesses were unanimously of the opinion . . . that the provisions of the existing Acts are not sufficient to meet the whole of the housing need in many areas, and that, even after the maximum number of houses has been built under these Acts, a serious shortage . . . will still remain in the majority of districts." The need for houses is put down to three causes: the rise of new

industries, the workers from which can live in the country; the general increase in the number of families; and to the general diminution in the number of houses available for young families owing to the facts that old persons can now, with their pension, live apart from their relatives or in an institution and that townspeople are taking workers' houses as "week-end" cottages.

The report refers with it seems thinly veiled distaste to the low standard of the overcrowding survey. "A large number of existing cottages . . . do not offer the standards of hygiene, amenity and comfort which a young family may reasonably expect. The position is also aggravated by the fact that the present standard of overcrowding is admitted to be a low one." The Committee does not think that private enterprise or the landowners have any substantial contribution to make, though in evidence two landowners' organisations claimed that the landowner was the proper agency, on such conditions, as, for instance, that subsidies should be given to "tied" houses; that tax remission should be allowed as subsidy, bearing the same relation to the cost of the cottage as the rate of tax; and that the most "uneconomic" housing, such as that for pensioners and widows, must be met by the authority. The National Farmers' Union agreed that the main supply must come from the authority. Agricultural workers are now receiving wages which, in the Sub-Committee's opinion, do not allow them to pay the rent of between 6s. 7½d. and 7s. 11d. economic for a house costing £350 to £400. The tendency of building costs to rise makes the position more serious (£10 on cost equals about 2d. on rent). A house ample and cheap for a small, grown-up family will be congested and dear for a large, young family. The report suggests, to meet this, that the authorities should have power to make rebates from rents in the case of the latter.

In addition to the general question, the report considers the Housing (Rural Workers) Acts, and makes several recommendations, and it also considers several important but minor points, such as the difficulties that arise because a demolition order cannot be rescinded, the great hardship caused by the displacement of very aged people, and the location of houses in relation to the villages and the amount of garden land to be provided.

#### THE CONCERT ON 6 DECEMBER

A number of years ago when the "social activities" of the R.I.B.A. began to develop the Council arranged that two of the nights during the session that hitherto had been occasions for Sessional Papers should be given to the Social Committee for them to organise some sort of entertainment. The first of these officially appointed social evenings is on 6 December, for which evening the Music Club has arranged a concert to start

at 8.15. The performers will be Miss Joyce Buckley, soprano; Miss Mary Armstrong, piano; and Miss Helen Barnett, flute. The programme is printed on page 96. It includes Schumann and Chopin piano solos, two groups of flute solos, two groups of songs with piano accompaniment, and one group of songs with the flute. No tickets are required, and there is no charge for admission, but it is hoped that everyone will buy a programme to help defray expenses. Another series of R.I.B.A. dances started on 5 November, when the first dance of the season was held. The next dance is on 17 December, and after Christmas there will be dances on 4 February and 22 April.

#### BIRMINGHAM AND FIVE COUNTIES BADGE

Presidential badges are always of interest. This one was made for the Birmingham A.A. by the late Arthur Gaskin and is now used by the Birmingham and Five Counties A.A. The Goddess of Architecture is enthroned in an oval frame in silver, gold and niello. The reverse is decorated with a pierced pattern of a basket of flowers surrounded with a border of scroll work and niello.







Block lent by the Architectural Association

## ARCHITECTURAL EDUCATION IN THE BRITISH EMPIRE

By PROFESSOR C. R. KNIGHT

*Dean of the Faculty of Fine Arts, Professor of Architecture, Auckland University College, New Zealand*

### INTRODUCTION

In a short foreword Professor Knight defines the scope of his studies, during which he visited nearly forty schools in seven countries. During his visit to America he endeavoured to familiarise himself with the policy and objectives of the United States schools to obtain a basis of comparison to serve during his survey of British Schools. The analysis in the report is confined to architectural education in the schools whose examinations are recognised as exempting students from the R.I.B.A. Intermediate and Final Examinations, though general art schools and building, engineering and town-planning schools were also visited during the tour and the evidence obtained there related to the specific subject of architectural education. Professor Knight was able to visit every school recognised for exemption from the Final Examination except

two in South Africa. The particular needs of Auckland University College School of Architecture were always borne in mind and a considerable part of the report was concerned with relating the general principles which form the main study to Auckland's particular needs. These special paragraphs have generally been omitted from this publication. The places of all omissions are marked in the text by asterisks. The full report can be seen in the library.

The introduction closes with an expression of thanks to the Carnegie Corporation of New York, whose generosity made Professor Knight's tour more comprehensive than would otherwise have been possible, to Auckland University College for the grant of twelve months' leave of absence and to the Secretary of the Board of Architectural Education, the Directors and staffs of the schools and all who helped him during his tour.

### THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

The Royal Institute of British Architects is the senior professional body of the British Commonwealth of Nations. Any study of British architectural education must first recognise the important part this body has played in its development. Ever since the granting of its first charter in 1837, education has been a primary activity of the Institute. First, in the selection of patrons and the equitable control of conditions governing apprenticeship, and, more recently, through its

Board of Architectural Education, the development of the school system. There is probably no parallel to the position held to-day by this independent professional body. Institutions of higher learning, usually very jealous of anything in the nature of outside interference, welcome the constructive criticisms made from time to time, and, indeed, frequently seek its advice when faced with difficulties. To understand this unique position, it is necessary to trace the development of architectural education during the last 50 years.

It has been stated in the foreword that membership

of the R.I.B.A. has long been held as the necessary qualification for the practice of architecture in England. It was never a State requirement, and nothing in English Law prevented any person from calling himself an architect and practising as such. Membership of the Institute was held in high esteem by the public. It was recognised as a qualification based upon ability and in consequence most students sought admission before setting up in practice for themselves. The position of the Institute in this matter was somewhat analogous to that held by the Royal College of Surgeons and Physicians in Surgery and Medicine.

In the first instance, a student was apprenticed to a practising architect and in his own time prepared himself for the examinations. These were three in number. The first, leading to probationership, was matriculation or some other adequate proof of a reasonable standard of secondary school education. The second—the intermediate—qualified for student membership and the third or final for full associate membership.

In a sense these examinations were the origin of the school system because very soon evening classes were held in the larger towns to instruct candidates in the required subjects. In 1894 Liverpool University inaugurated a two-year course of day classes with the objective of more adequately equipping students for apprenticeships and shortening the term of pupillage. The idea of providing organised progressive training was so successful that in 1902 the same University increased its day course to three years, for which a certificate was granted, and the R.I.B.A. accepted this certificate in lieu of its *intermediate* examination. The system of recognition, now such a feature of British architectural education, was thus originated. In 1904 similar courses were recognised at London and Manchester Universities, and in 1906 the examinations of the Architectural Association School in London were accepted. This is an independent institution run by practising architects. It must be remembered that the ultimate objective in these Schools was still membership of the R.I.B.A., and the certificate was taken merely as a means to that end. Once the principle of recognition was accepted the idea of ultimately providing full professional training in an institution of higher learning must have been born, but it was not until 1920 that the full-time five-year courses of Liverpool University and the Architectural Association were accepted by the Institute in lieu of its own *final* examination, and then only on certain conditions. First, candidates for membership must, in addition to the school training, produce proof of at least twelve months' office experience. Second, they must pass an independent examination in Professional Practice, and finally R.I.B.A. external examiners were appointed to review the students' work at the intermediate and final stages, that is, at the end of the third and the final years.

It was, of course, recognised that the acceptance of school training in lieu of apprenticeship was a complete

change in the Institute's policy of architectural education, and long and earnest debates ensued. The school supporters pointed to the excellent results achieved in the United States by its collegiate system of architectural training, which had commenced with the School at the Massachusetts Institute of Technology in 1865, and by 1920, the year in question, had no fewer than thirty-one schools of collegiate rank. They referred to the Paris Ecole des Beaux Arts, which had long been recognised as a premier training centre for architects, and to the growing complexities of the profession, which demanded organised progressive training. On the other hand, the great majority of practising architects had learnt their art in the School of Apprenticeship and pointed with justifiable pride to the outstanding work of this or that practitioner. They feared a complete lack of contact with practical problems and prophesied a group of graduates out of touch with realities.

A conference and enquiry was inevitable, and this took place in 1924, when an international Congress was held in the R.I.B.A. premises in London, when the systems of architectural education in vogue in the following countries were considered: England, America, France, Italy, Austria, Belgium, Denmark, Holland, Hungary, Norway, Spain, Sweden, Japan, Mexico and the British Dominions of Australia, Canada and South Africa.<sup>1</sup>

In the meantime, the Schools continued to grow. In 1921 London University and the Royal Technical College at Glasgow received full recognition. In 1922 Manchester University and Robert Gordon's Colleges, Aberdeen, were added to the list, and in 1923 McGill University, Montreal, became the first colonial school to be fully recognised. Many other schools, notably Sheffield University, Leeds School of Art, Edinburgh College of Arts, and Toronto University, had been accepted for the intermediate stage.

In 1927 the R.I.B.A. set up a representative Committee under the chairmanship of Mr. Maurice Webb, who was, at the time, chairman of the Board of Architectural Education, to consider and report on architectural schools and their distribution.<sup>2</sup>

The following is an extract from the report:—

The Committee believe that whole-time architectural courses provide the best way of training to-day, though the genius will flourish in almost any surroundings. At the same time, the Committee recognise that want of means often prevents students from attending a full-time day school course at a distance from their homes.

Looking into the future, the Committee believe that the Profession of Architecture will ultimately demand as strenuous a preparation as those of medicine or the law. Provision for comprehensive training of this kind should be centred in a few large schools and exemption from the Final Examination for the Associateship, for which at present the Council of the R.I.B.A. requires at least a

<sup>1</sup> Report of First International Congress of Architectural Education. R.I.B.A. London, 1924.

<sup>2</sup> Report of the Committee on the Distribution of Schools of Architecture. R.I.B.A., July 1927.

five years' course, should be granted only to successful students of these Schools.

The Committee feel, however, that a large number of Schools of a preparatory nature is required offering three-years' courses recognised for exemption from the R.I.B.A. intermediate examination. These courses would lead up to the courses offered at the larger Schools recognised for exemption from the R.I.B.A. Final Examination. Such an arrangement would ease the financial difficulties of students who would otherwise have to live far from their homes.

The committee made a very careful analysis of the distribution of Schools and made definite recommendations regarding the locality where additional Schools should be recognised, both at the intermediate and final stages.

The report was adopted by the R.I.B.A. Council on 11 July 1927, and a settled policy of encouragement for the college training of architects has been the policy of the Institute ever since.

At the present time there are 22 schools recognised in Group One (final stage) and 34 in Group Two (intermediate stage).<sup>a</sup>

The R.I.B.A. did not abolish its own examinations in architecture and many students still become members of the Institute in this way. In 1926 approximately 45 per cent. of the admissions were from recognised Schools. Last year approximately 60 per cent. of the admissions came from the Schools. There is justification for assuming that a large percentage of the remaining 40 per cent. either attended one of the preparatory or Group Two Schools for three years, or worked in one of the evening ateliers attached to many of the day schools.

It is very clear that it is extremely difficult to qualify without attending a school at all. In 1927 the R.I.B.A. recognised the necessity of this by inaugurating a policy of maintenance scholarships which enables deserving students with little finance to attend one or other of the recognised Schools, a policy that could be profitably adopted by colonial institutes.

The carrying out of the R.I.B.A. policy has been entrusted to a Board of Architectural Education under the Institute. This body is composed not only of practising architect members of the Institute, but also leading educationalists from the Universities, the Government Education Department and the Secondary Schools; in addition, the Directors of each School recognised under Group One and a certain number of representatives from Group Two Schools. The representative character of the Board is very important. This not only endows its recommendations with unusual weight but removes any criticism of self-interest of the profession as a whole. It means, too, that the directors of important Schools are constantly in conference, resulting in the unified objectives so apparent in the British Schools of Architecture.

Another function of the Board is to award the prizes and studentships with which the Institute is endowed. Among these are medals for competitions amongst the recognised schools. This creates a sense of competition and enables the work of the different Schools to be hung side by side. In this respect the Board performs a similar function to the American Beaux Arts Institute, but does not interfere with normal class work to the same degree. I was impressed this year by the uniform standard of the work exhibited and I consider this was largely due to the co-ordinating policy of the Board. The system might be criticised for the common tendency of Schools to work to one pattern. It depends largely upon the point of view of the investigator. Certainly there is much less tendency to experiment than in the United States, where each school more or less works out its own destiny. It must, however, be remembered that there is nothing in the R.I.B.A. policy which prevents independent action; in many ways it is welcomed, but the fact remains that most schools are inclined to adopt a policy of safety rather than embark upon the precarious one of individuality. The R.I.B.A. is chiefly concerned with vocational ability, and its system of recognition is merely one of exemption from its own examinations, yet its standing is very much higher than this. Its carefully developed policy and the representative character of its Board of Education give it a position of great importance. The view is held by some that it should be concerned only with the recognition of Schools of Architecture which have reached the required degree of vocational training irrespective of their locality. This is, however, at variance with Mr. Webb's report on the Distribution of Schools of Architecture before referred to. This report very clearly indicated the localities where additional Schools should be recognised and was definitely opposed to the recognition of two Schools where one would suffice. It also recommended a co-ordinating policy between Group Two and Group One Schools. Both recommendations need carrying into effect to produce an economical and adequate school system. Some pronouncement by the Board is wanted on the population necessary adequately to support a school, and the development of Schools in areas already properly provided for should be discouraged.

Group Two Schools are clearly intended as preparatory Schools for Group One Schools, yet at the moment there is little co-ordination between them. Admittedly there are great difficulties, yet a system of affiliation with a common educational policy would encourage students to regard the preparatory school as merely a stepping-stone to the senior school, and not a complete training in itself from which they can drift into offices as partly trained men.

It is the R.I.B.A. which has developed British architectural education. It is not entirely disinterested, yet in doing so it has performed a very great public service.

<sup>a</sup> For details of these Schools see Appendix 1 and 2 (omitted from this publication).

### THE SCHOOLS

The 22 schools in Group One and the 34 in Group Two are distributed throughout the Empire as shown in the following table :—

RECOGNISED SCHOOLS OF ARCHITECTURE			
Group I, 22 Schools		Group II, 34 Schools	
England .. ..	9	England .. ..	15
Scotland .. ..	3	Scotland .. ..	4
Wales .. ..	1	Wales .. ..	1
Canada .. ..	2	Canada .. ..	3
South Africa ..	2	South Africa ..	2
Australia .. ..	4	Australia .. ..	6
New Zealand ..	1	New Zealand ..	1
		India .. ..	1
		Ireland .. ..	1

The 22 Group One Schools are also recognised as Group Two Schools. Therefore there are 12 additional Schools recognised to the Intermediate stage only. In addition there are six Schools in Great Britain which may submit school drawings in lieu of the Testimonies of Study required for the R.I.B.A. examinations. This does not exhaust the institutions teaching architecture in some form. Mr. Webb, in his report of July 1927, listed no fewer than 112 institutions in the British Isles which taught architecture in whole or in part. Eight of these were in Ireland, five in Scotland, three in Wales and the remainder in England.

The 22 Schools of Group One comprise 14 Schools either affiliated to or definite departments of a University. Four are departments of schools of art, three attached to technical colleges and one is independent. Of the extra twelve schools in Group Two, three are in Universities, four in schools of art, three in technical colleges and one is independent.

The different types of institutions offering architectural courses are somewhat confusing, and are difficult to explain. They may have been due to the points of view of those responsible for starting the Schools in the first place, and, in a measure, to the attitude towards architecture of the governing bodies of the institutions themselves. It was more likely a matter of chance, as most Schools first started as evening classes in isolated architectural subjects and these were more readily given in Technical Colleges and Art Schools than in the Universities. Once started they grew naturally into full day schools.

Architecture is both an art and a science; it is a profession requiring its own special equipment and training. The Schools to-day are all distinct departments. They may for convenience be affiliated to engineering or to art, but in every instance they are self-contained. They are governed by their own Board of Studies, and have their own teaching staff. The lecture courses given in other departments are rarely suitable to architecture's needs, and, while the teachers in associated departments are freely used, they nearly always provide special courses.

It might seem at first glance to matter very little what type of institution the School is attached to, provided the training is a sound one, and, in a measure, this is true, but I am one of those who believe that Architecture has much to gain from the broadening influences obtained in University life. It is interesting to note that of the nine Group One Schools in the colonies eight are in Universities; furthermore, there is a very distinct movement towards amalgamation or affiliation with Universities on the part of Schools attached to other institutions in England. Architectural education has completely grown out of the original idea of classes in drawing and lectures in a few isolated subjects which prevailed in England at the beginning of the century. To-day it is a complete course of vocational training equipping its students with a wide conception of life. The cultural value of its classes is noticeably growing; students in other departments are freely availing themselves of its curriculum. Its proper place is in the University alongside the students of other faculties. It will receive much from this association, and it will give much in return. I consider New Zealand's policy of concentrating its architectural education in its University is in every way desirable and justified, and strictly in line with modern tendencies.

#### DEGREES OFFERED

In the British Empire only Universities are empowered to grant degrees, and then only in accordance with their charter. Most of the Universities which have had an amending act since architecture came within their scope offer degrees of Bachelor of Architecture and sometimes Master of Architecture. In such cases the Faculty is usually a separate one. In others the usual method is to attach it to the faculty of Arts, offering the degree of B.A. in Architecture, or, as in the case of Manchester and London, B.A. with Honours in Architecture. Liverpool has an Honours B.Arch. as well as an ordinary degree; the courses are of precisely the same length. Students are selected at the end of the third year for honours, and undertake a heavier course majoring in either Design or Construction.

Those Universities which attach the Architectural School to the Arts Faculty usually provide regulations for Bachelors to proceed to M.A., requiring the presentation of a thesis one or two years after graduation as a Bachelor.

The M.Arch. degree is rare. Liverpool offers it, but only on extremely difficult conditions, namely, ten years subsequent to graduation as a Bachelor and upon the presentation of evidence of having designed and supervised the erection of a building or buildings of outstanding merit. The British practice is in this respect different to the United States. There the master's degree is usually offered for one or two years' additional work in a graduate school in a similar way to the master's degree in other faculties. Toronto follows the United States method and grants M.Arch. upon presentation of a thesis and one year's post-graduate study in the school.



Witwatersrand University in South Africa has a similar provision. There is a strong feeling in England that five years is quite long enough for a student to spend in College, hence a reluctance to offer qualifications requiring longer residence. Most authorities express a strong desire not to weaken the bachelor's degree by offering M.Arch. for further academic work. They believe that every inducement should be given to graduates to go into the field of actual building after five years' University study. The Liverpool method of awarding M.Arch. for actual building merit seems from this point of view to be justified. It will, however, take a long time for the public to appreciate that this distinction is of greater merit than the master's degree in other subjects. Other Universities prefer that no master's degree be offered at all. At the moment it seems necessary to offer some inducement to research workers with an academic bent. The M.A. with provision for advancement to a doctorate would seem the best way to meet this need. New Zealand has under its charter the right to offer a Master of Architecture degree, but conditions governing its award have not been discussed. *I consider the matter should still remain in abeyance until British practice is more clearly established.*

Institutions of non-University rank award a diploma and this practice is often duplicated in the University Schools for non-matriculated students. The tendency is to make the diploma a purely vocational qualification and the degree broader in scope. Liverpool, however, makes no distinction in the training for degree or diploma, both being purely vocational.

In England a certificate is granted at the conclusion of the Junior School for reasons explained under the R.I.B.A. section. This procedure is not adopted in the Colonies, nor is there any real need for it in any but Group Two Schools.

#### ENTRANCE

The entrance examination for degree courses is an approved matriculation examination. For the diploma courses proof of a satisfactory secondary school education is generally accepted. In Canada there is no diploma course in the Universities. In consequence every college-trained architect in that country matriculates. Matriculation is required in South Africa and in the Australian Universities. The Sydney Technical College grants a Diploma and the entrance qualification is also the matriculation examination. This is the only Group One School in the Colonies which is not a department of a University. In New Zealand matriculation is necessary for entrance to all courses. A College Diploma is granted but this is designed for an entirely different purpose from those elsewhere. It is not recognised by the R.I.B.A. and is granted to professional students who attend one or two years full time in the School and is intended to encourage students who are unable to avail themselves of a full course of College training to attend for a lesser period. It does not follow that the graduates from Technical and Art Colleges are technically lower in standard than University graduates, because the work in the Schools is essentially vocational. Nevertheless, a high entrance qualification is very desirable. It enables students to obtain a fuller education from their college life. In New Zealand the matriculation examination is uni-

versally regarded as the conclusion of the secondary school work: even so, my experience has indicated a weakness in Science and Mathematics. This might be due to a lower standard of examination than is required in England.

#### THE LENGTH OF THE COURSE

In all Group One Schools the length of the course is five years or its equivalent, due, no doubt, to the system of R.I.B.A. recognition before explained, which stipulates a course of this length. It is notable that a majority of American Schools are of the same length. There are still a number graduating in four years but these are becoming less every year. Princeton, which is a graduate school, requires six years, three years to the B.A. stage majoring in Architecture, followed by three years' post-graduate work for the degree of Master of Fine Arts.

The length of an Architectural course is not due to the wide nature of the curriculum but to the necessity of training the student to express his knowledge in graphic form, all subjects being applied to actual buildings in the drawing offices. Usually the first three years are full-time study in the Schools, but the senior years are divided up in a number of ways due to the universal requirement of twelve months' office or practical experience required by the R.I.B.A. for exemption from its examinations. One method is to require attendance for two terms only in the fourth and fifth year. The term excused is usually the first term in each session, which it is expected will be used, together with the long vacations, in office experience. This method is adopted by Armstrong College, Durham, Manchester University, Leeds School of Art and Regent Street Polytechnic. Liverpool University and the Welsh School at Cardiff excuse students the first term of the fourth year but require a full year's attendance during the final year. Sheffield University, Toronto and McGill require a full five-years' attendance, leaving the student to obtain the requisite twelve months' practical experience as best he can. In the case of McGill only eight months' practical experience is required for the degree and twelve months for the R.I.B.A. exemption. London University requires full-time attendance for the first four years and attendance at an evening atelier during the fifth, the office training being obtained during the day. This is similar to the New Zealand School, which requires four years' attendance followed by the preparation of a thesis in the final year without necessarily attending the University. In Scotland there are further variations. Aberdeen follows the first three years' full-time with three years' evening attendance. Edinburgh generally sends its students to offices for a full year after the third year at School, then brings them back for another two years' full-time. Glasgow grants a degree in four full years but requires twelve months' practical experience in addition. Sydney Technical College grants its diploma for six years' part-time study.

It is open to question whether twelve months' practical experience is adequate for the practice of architecture, but it must be remembered that the Schools were not responsible, it being a requirement for the R.I.B.A. exemption. From the Schools' point of view, it creates complications and some loose thinking about their function. The Schools are primarily concerned

with academic instruction—that this should be as practical as possible goes without emphasis. They are not in a position either to supervise or test the value of practical office experience. Obviously the twelve months' experience obtained by one student could be far more valuable than that obtained by another. In America this confusion of functions does not exist. The Schools train a student for four or five years in the aspects of design and construction they are competent to teach. They then pass him out to the offices for practical experience. After three or more years the State Registration Boards test his capabilities for practice before granting him a licence.

There are obviously many aspects of architecture which can be best taught in the Schools, and some aspects which can only be learnt in actual office experience. It would help architecture a great deal if these two distinct training grounds were more clearly recognised by the critics. To say a student is deficient in knowledge of office procedure is not a criticism of the Schools but of the offices in which he obtained his practical experience.\*

#### SPECIALISATION

Speaking generally, the British Schools do not specialise. The courses are designed to equip the student for general practice on his own account. They are not designed to fit him specially for employment as an architectural draughtsman, although this may be achieved in the process, nor do they emphasise any particular field of specialisation such as domestic or ecclesiastical design. It is necessary to emphasise these facts, because some critics condemn or are sceptical of school training because they have found graduate employees deficient in this or that aspect of their practice. The graduate has a sound knowledge of fundamentals. He has individuality which has been nursed and developed by his teachers. Impatient employers should remember that the graduate himself finds it irksome to restrain that individuality when in the service of others, but he is there to serve, he is there to learn the very aspects of office work the employer considers he is deficient in. If the School work has been done properly he has been taught to think, and

\*An asterisk at this and all other points marks an omission, as stated in the Foreword, generally of matter relating solely to the policy and affairs of Auckland University College.

stupid errors are rarely made by people endowed with this quality.

The profession of architecture is quite wide enough for specialisation. In fact the pre-eminence of many practitioners in one special branch is becoming almost usual in the larger populated countries. The time may come when the Universities will offer post-graduate courses in specialised branches of architecture. The School at Edinburgh has developed an excellent post-graduate course in town planning by means of a liberal scholarship fund which enables the School to invite suitable candidates to enter for it. The work they do is applied to local civic problems and is often enlightening to both the public and civic authorities. It is difficult to estimate the amount of good the work does, but it is undoubtedly a very important development which may have far-reaching results. Liverpool and London Universities also have post-graduate courses in town planning. The future may see the introduction of post-graduate courses in special phases of architecture such as commercial or ecclesiastical work, depending upon the presence of special facilities for its study in the neighbourhood of the School. Harvard and Princeton Universities are post-graduate Schools, but offer a fuller general training rather than a specialised aspect.

It is a matter for regret that our two senior Universities of Oxford and Cambridge have not developed something of a similar kind. Both are very rich in architecture and both can offer a cultural education unequalled in the British Empire. The Cambridge School of Architecture is recognised to the intermediate stage. There is no school at Oxford University. If these two great Universities offered specialised courses of two or three years to graduates of other universities they would extend their considerable educational facilities to one of the oldest of the fine arts and in so doing perform a great service to education.

There is no need for specialisation in the Colonies. Special problems like the New Zealand problem of earthquake-resisting construction can be covered by the necessary bias in the general course. Students with special aptitude should be sent to special Schools in England or the United States with post-graduate scholarships. This system is in operation in New Zealand at present and should be continued. It ensures amongst the graduates of the Dominion a number of first-class scholars with an exceptionally wide experience. The number of scholarships could profitably be extended to one every year instead of the biennial award made at present.

#### THE CURRICULUM

The architect is a collaborator who, by his wide knowledge of the various trades and professions concerned with modern buildings, is able to harmonise them into their respective parts. He does not merely carry out the ideas of his client. He is an adviser who, due to his special training, is able to prescribe for expanding business or a cure for the ills of poorly organised administration. To succeed he must be

respected for his prescriptions in the same way as a successful doctor. This means he must be taught to think and have a mind trained to grasp a problem logically. His prescription is his plan and in this he must be able to express himself clearly. Provided the training achieves this objective, it is of precious little importance whether this or that subject is included in the curriculum.



The actual subjects included in the curriculum of the Schools are many and varied, but all aim at the same objective, namely, the development of a sound knowledge of the following sections :—

1. Structural principles and their application to actual building problems.
2. The progressive development of architecture. The fundamental laws of design and the ability to apply them in practice.
3. Architectural law and practice.

In addition, some University Schools add another group of Art or Science subjects as an introduction to learning with the objective of equipping the student to deal logically with the varied problems he will meet with in practice. The matter may be considered under two headings :—

1. The studio or drawing office.
2. The technical curriculum.

#### THE STUDIO OR DRAWING OFFICE

The architect expresses his ideas in plans. These drawings represent the application of his knowledge to a problem. By the drawings the value of the solution is judged, and either approved or rejected. From them a building is erected and equipped. The architect's drawing office has its counterpart in the School Studio. This is the centre around which the whole school life rotates. Here the student spends long hours learning to express in readable terms his intuitions; here he investigates the theories of good design; here he applies the principles of mechanics to actual beams and columns; here, in fact, is the architectural School. During the five years of the course four-fifths of his time will be spent there. It is, therefore, imperative that in it he shall be well guided and developed.

Usually, the studio is a place of privileges. Students converse in a free and easy manner. The desk of each individual becomes very personal. It is filled and often surrounded with personal possessions. It is usual for the student to spend eight, ten, twelve and even more hours a day in the studio. When he has reading to do, he often prefers to do it at his studio desk, because he feels more at home in the atmosphere created there. Here the lights go out last in every school. More often than not some students are ejected at night by compulsion, and then in desperation carry home large drawing boards and innumerable sketches to work still longer into the early hours of the morning. Every School visited tells this same story of studio enthusiasm. Never did I find it necessary for a School to keep a register, although many Schools have a sign on and off principle to conform to a needless regulation. If the students do not love the studio and the work they do in it, then the School will never succeed. Restrictions curb this enthusiasm. They irritate both staff and students: hence they are always reduced to a minimum. Yet it is a place of method. An understanding of this method is important.

There is a very great similarity in all the British schools in their studio approach, much more so than in the United States, where the Schools have developed a greater individuality, as shown by the careful conservative training of Pennsylvania and New York Universities, the stimulating procedure at Minnesota, where every new student starts at once on creative design, and the Harvard principle of organising the studio strictly on office lines.

Generally the British method is a conservative one. The first two years are devoted to fundamentals and simple design exercises. The third and fourth are the heavy design years when style and treatment are free, and the fifth year is the thesis year.

When the British Schools were in their infancy and classical architecture at its peak, long hours were spent in the study of the classical orders, first individually, then as compositions or *analytiques*. To-day this aspect is given a fairer perspective. The orders are treated more as studies of structural and decorative motives of a period. The first two years include theoretical studies of form and planning, measured work and simple designs. The designs are usually controlled as to stylistic character, and are often in the form of historical studies correlating the studio work with the history lectures. Simple construction details are applied similarly. After lectures in brickwork, carpentry and joinery, such portions of a current design are detailed in the studio. More abstract subjects like descriptive geometry and mechanics are applied as far as possible in the same way.

In the third and fourth years larger designs, free as to stylistic treatment, emphasise plan and various aspects of external form, together with character studies of decoration. The structural side includes working drawings of domestic work in the third, and a commercial structure in the fourth. In both cases they are the development of the student's own designs.

In the fifth year those Schools requiring a thesis devote considerable time to its preparation. It nearly always includes both design and construction. The problem is always set by the student himself and is usually for an actual building scheme for some locality known to him. In this it differs from the earlier design problems, which are set by the staff to emphasise some particular aspect of planning or structure. Town planning plays a prominent part in the English schools at this stage and civic improvement schemes are popular with the students. They are usually prepared in the School. The New Zealand method of preparing a thesis away from the school is regrettable, because the student is isolated from the school library and the advice of his tutors. The proposal made under the length of the course would overcome this difficulty.

The time spent on the thesis varies considerably. Liverpool gives the whole fifth year session to it, and the result is shown in some remarkably complete and

comprehensive designs, including research sheets, statistics and complete working drawings.

Most schools devote one term to the thesis, developing it over the same field with a series of typical sheets instead of complete details. Toronto and Edinburgh do not require a thesis in the fifth year. Toronto requires it in the sixth year for a master's degree. The Scottish Schools instead compete for a group of competitions sponsored by the Scottish architects. Personally, I believe in a piece of original work as the final experience of the student's school life. Anything in the nature of competition between Schools or individuals in this matter would, however, be regrettable. The work should be judged individually as an example of the student's ability to gather relevant facts, to analyse them and develop a working architectural solution just as he will have to do in practice. It is a test of an analytical mind and artistic ability. This does not require a grandiose subject.

#### SHORT AND LONG PROBLEMS

In Schools where the thesis is of one term's duration the student does the normal short and long problems during the remainder of the session and when the thesis is done in the School the short or day sketches are required while it is being prepared.

The short problems are usually one day or six hours. Some Schools still give one a week, but the majority have reduced the number to one a fortnight or four to five a term. McGill requires sketch designs for its long subjects only. The Architectural Association restricts most of its sketch subjects to the same purpose. Personally, I consider the short problem an excellent method of covering much of the architectural field without the labour of developing all problems to the finished design stage. It also stimulates the imagination and develops a faculty of rapidly reaching conclusions on the problem itself.

The long problems are carefully prepared and rendered drawings and vary in length from two to six weeks. Two to three are given in each term. One of these is usually chosen each term to be carried to the final stage of working drawings. The whole process coincides with office practice. First the sketch suggestion, then the developed design, and, finally, the working drawings from which the structure is built.

#### JUDGMENT

The problem method is universally adopted in British Schools. Many still follow the Beaux Arts system of awarding "mentions" to designs of merit, with, however, the addition of a pass mark for designs not deserving commendation but of acceptable standard. This coincides with the "Credit" mark awarded in New Zealand. Other schools—and they are increasing in number—have not found the mention method flexible enough and have adopted a 1 to 10 mark, 4 being a failure. It does not matter what system is adopted provided it is simple and easily applied.

After the awards are made a criticism by a member of the staff or a visiting architect is nearly always given, and these develop into discussion groups on the solutions offered.

#### PROMOTION

It follows that a certain proportion of values is necessary before a student is considered a candidate for promotion, usually 50 per cent. Most Schools, however, while requiring a minimum number of values, make their promotion upon a comprehensive re-examination of the student's work, both written and graphic, at the end of the school year.

The Architectural Association has recently introduced a series of units by which promotion is made term by term. Students may enter this School at the start of any term. Each unit has 15 to 20 students who must pass successfully 15 units before graduation, or in other words 15 terms of work. The term's work is divided up in an interesting way. Instead of students attending lectures for so many hours each week the work is concentrated, and a whole week or weeks are spent on history or decoration or descriptive geometry or design as the case may be. The whole experiment is new and will be watched with interest. It is too early to criticise it in any but general terms. The chief advantages may be derived from this concentration on individual subjects. Design problems are not broken into with lectures and other aspects of study. It permits keeping the lecture material well ahead of studio requirements, and failure relegates a student not for a year but only a term. The chief disadvantage seems to be a tendency to divide the work up into watertight compartments rather than correlate it throughout the year to the other subjects, and, finally, the duplication of classes when the first term's work has to be repeated in the three terms of the year makes it obviously suitable only for a large centre of population like London, where the student entry is sufficient to warrant the necessary increase of staff.

#### THE TECHNICAL CURRICULUM

In view of what has been said a detailed consideration of the technical subjects is not necessary, but a few general remarks about the method adopted in the teaching of technical design and construction can be made. In the early days of school training the technical subjects were taught more or less independently; to-day, these subjects are correlated with one another and with the buildings designed in the studio. On the design side, History of Architecture and Theory of Architectural Design are found in all courses. History generally finishes at the end of the second or third years, but McGill carries it right through to the fifth year. The history lectures are applied in the studio with period studies and decoration problems. Theory is often given in all years, materials and fundamentals in the first and second years, advanced programmes in the fifth. Theory, of course, has a direct

application to the studio design and some schools give their theory lectures in the studio applied directly to the problem on the boards. Supplementary lectures on planning and functional expression are added as required.

In construction the same application is made, the constructive trades, steel and concrete, sanitation, heating and ventilation being applied and detailed as part of the studio work. The constructive trades lectures are generally completed at the end of the second year. Steel and concrete are given in the third and fourth. Mathematics and mechanics are first or second year subjects. Professional practice, law, specifications and building quantities belong to the fourth

and fifth. As far as possible abstract problems are eliminated. In only one School visited was physics required, yet all Schools include a study of the subject as part of the applied work. The fundamentals of heat, light and sound are given as a preliminary to the study of heating and ventilation, illumination and acoustics.\*

*All the Schools visited laid great stress on flexibility of syllabus.* The subject matter is often varied year by year. The point of view is again the emphasis upon practical work in the studio. As a subject seems desirable or redundant, or the prescription needs amendment, it is changed at the discretion of the school board.\*

### EXAMINATIONS

It is clear that all British and American schools place the greatest emphasis upon the practical studio work. Every authority consulted emphasised the necessity of examining students by their ability to solve architectural problems in the drawing office rather than by abstract text-book problems in the examination room. This does not mean that the three-hour written examinations are not given, but simply that they are considered conjointly with the studio work instead of independently of it. Partial passes as understood in New Zealand do not exist elsewhere. Many Schools simply pass the student into an upper grade by examining the whole of his work or relegate him for a further year. Border-line cases are frequently given supplementary examinations at the end of the long vacation. Other Schools permit a partial pass if they consider the student needs additional study in some subject which is not vital for promotion. In all such cases it is at the discretion of the architectural faculty.

The following table shows a series of values allotted to the various elements of the curriculum by Liverpool University. These values are taken into consideration when deciding upon a pass or fail or the grade of pass. Actually each subject is given a value so that comparison can easily and quickly be made. For purposes of comparison with studio values these are totalled in the table.

Years	First Second Third			Fourth		Fifth	
	All Courses			Ordinary	Honours	Ordinary	Honours
Studio Work	10	10	10	10	20	15 inc. thesis	20 inc. thesis
Written subjects	11	8	9	2	6	2	4

*Note.*—All written subjects are vocational.

It will be observed that written subjects are given their greatest emphasis in the first three years. As the

student develops his ability to express himself in the studio, the written subjects total value decreases, until, in the final year, four-fifths of the examination values are given to the studio work. The values actually reflect the time spent on the different subjects, that is to say four-fifths of the student's time is spent in the studio in the final year. The value of the system thus becomes evident.

Every other School visited applied a similar principle, although they did not show it in the graphic way illustrated.\*

The method adopted for testing a student's knowledge is definitely a domestic matter for the institution concerned. The real test of the qualification is in the performance in practice of its graduates. Upon this performance rests the reputation of the institution. It is customary in Universities to appoint an external examiner, usually from another institution of equal or higher rank, for the sake of unity and from whom an independent report can be obtained. Subject to this check, the actual setting of papers and their marking is a matter for the teachers of the respective subjects.

I have already stressed the necessity of regarding architecture as an applied science. This is achieved by considering together the written examination papers and the studio application. In practice, the governing body of the institution asks for a recommendation from the architectural faculty or Board of Studies for promotion or the granting of a qualification. The faculty or Board appoints a Board of Examiners composed of the Director of the School as chairman and the teachers of the respective subjects as members, together with the external examiner or examiners. The subjects in which written examinations are required are decided by this Board. The Board always entrusts the teachers of the subjects with the setting and marking of these papers subject to its review, which is made together with a *viva voce* examination of the candidate, who appears with his studio work before the examiners. The Board then makes its recommendations to the Governing Body for the passing or failure or partial pass of the candidate.

All the Group One Schools have been recognised by the R.I.B.A., as explained elsewhere, subject to certain conditions, one of which is the appointment of two R.I.B.A. external examiners to review the student's work at the intermediate and final stages. These

examiners are appointed by the institution, and usually act as the external examiners for the institution in the usual way. In such cases they are usually heads of other Schools or men with educational experience.\*

## STUDENTS

It is very tempting to try to ascertain the number of students desirable in relation to a given population. One hears repeatedly that too many students are being trained for this or that profession, and I often wonder where the persons making these statements obtain their facts. Obviously, temporary unemployment due to a depression is an insufficient reason for the training of less technical men, because in architecture it takes at least five years to fit the student for his office work. Logically, in times of depression there should be an increase in new enrolments, because by the time they are ready to leave their School there should by past experience be another boom. Instead, while the depression lasts few students enter the professions and when the boom follows there is an inadequate number of graduates to meet the professions' needs. This is precisely what has occurred right throughout the world. To-day, when every British country is engaged upon a heavy building programme, the Schools cannot supply the demand. Every thoughtful educationalist would like to straighten out this irregularity both in the building programme and in student entries, but it seems to involve economic factors beyond the control of individuals.

The following analysis is based on the idea of taking long-range values with the purpose of reaching some logical conclusion on the legitimate number of students and architects per million of population. Too many assumptions are necessary to reveal accurate conclusions, and I am fully conscious of the danger of accepting the result too literally. After all, the law of supply and demand will, in spite of what may be said, be the governing factor, and, from a University point of view, we are concerned more with standards of knowledge than with the regulation of numbers.

The following sources of enquiry were investigated :—

1. *Report of the Joint Committee of the R.I.B.A. and the Association of Architects, Surveyors and Technical Assistants 1927*

This Committee was appointed to enquire into the alleged overcrowding of the profession.

The Committee estimated that there were 12,000 architects including 1,300 pupils and students in England and Wales in 1927. The population was given at 38 millions, or one architect to 3,167 of population in England and Wales. The student roll was estimated as follows :—

Full-time schools	..	..	..	400
Part-time schools	..	..	..	100
Pupils, in offices	..	..	..	800
Total	..	..	..	1,300

The average period of training was given as 3½ years before

wage earning commenced ; therefore, 400 young architects entered the profession annually without allowing for wastage. The average working life of the architect was assumed at thirty years, therefore 400 were required annually to maintain the numerical strength of 12,000 without allowing for any increase in the population.<sup>1</sup> From this evidence there are 315 architects per million and 34 students and 10 graduates per million of population are required annually.

### 2. *Registration Council*

In 1931 the British Government passed an Architects' Registration Bill, under which practising architects obtain a licence by registration. It is not compulsory, but it is estimated that the great majority of architects are registered under its provisions. Unfortunately, the Council has not been in existence long enough to give authoritative averages, but the figures supplied by courtesy of the Registrar are interesting.

To date, 11,820 architects are registered for Great Britain, that is England, Wales, Scotland and Northern Ireland. The population of this area in round figures is 48 millions; therefore, 246 architects are registered per million of population, or one architect to 4,060 of population. Last year 251 registrations were made from students who had just passed one or other of the qualifying examinations, or five graduates per million.

### 3. *Estimate made from Census returns 1931*

The Census returns of 1931 returned 9,256 qualified architects in England and Wales, the population at 40 millions, or 231 architects per million and one architect to 4,321 people. Taking the average working life as 30 years, 309 architectural graduates per annum are required, or nearly eight per million.

### 4. *R.I.B.A. student statistics*

Statistics supplied by the R.I.B.A. show that in 1931 156 students became members of the Institute by graduation from the recognised schools in the United Kingdom and 131 were admitted by passing the R.I.B.A. final examination, a total of 292, or six per million. In 1934 the figures were schools 173, R.I.B.A. final 127 ; total, 300 graduates.

A summary of these independent sources of enquiry follows :—

### SUMMARY

Source of Enquiry	Pop. to each Architect	Architects per million	Grad. per million
R.I.B.A. Joint Committee	3167	315	10
Registration Council	4060	246	5
Census (1931)	4321	231	8
R.I.B.A. statistics	—	—	6

From these figures, it would not seem unreasonable to estimate that one architect is required for each 4,000

<sup>1</sup> Overcrowding of the architectural profession. Report of the joint committee, R.I.B.A., 1927.



population or 250 per million and that the profession needs eight graduates per million from all sources. It is interesting to note that Professor Bosworth, in his book on Architectural Schools in the United States, estimates the Schools graduate six per million irrespective of other means of entry.\*

#### SIZE OF SCHOOLS

There are twelve Group One Schools in England, with a total roll of 1,089 students, an average of 90 students per school. Included in this are two large Schools—the Architectural Association with 253 and Liverpool University with 192. Eliminating these two the average number of students is 64 per School. In Canada the two Group One Schools do not desire a roll larger than 40 each. In the United States the roll strength is usually much greater. The smallest Group One School visited had 25 students. Compared to this the New Zealand School roll of 46 compares favourably.

Looking at the matter from a population point of view, the United Kingdom has 12 Schools for 48 millions; Canada 2 for 10 millions; South Africa 2 for 8 millions, of which only 2 millions are whites; Australia 4 for 6½ millions, and New Zealand 1 for 1½ millions. In the United States, there is one School to every 2,361,000 people.\* It is obvious from these figures that one School of Architecture is adequate

for New Zealand's needs for some considerable time to come.

#### STUDENT ACTIVITIES

Students of Architecture are a cheerful lot the world over. Their course is long and most of it is done in company with their fellows. This is excellent training. They learn to be tolerant and to respect each other for their individual qualities, and this respect lasts through life.<sup>5</sup>

Critics who have never had the experience of working in an Architectural School have stated that the studio work is likely to be the work of the instructor, not of the student. In no School visited could this be said to be true. Architecture is too subtle for a member of the staff to be responsible for a student's work unless he actually drew it himself, and that would be impossible. In any case, a complete answer is given by the student's enthusiasm, which none will doubt. Such enthusiasm could not exist if the work were not their own. The students of Architecture are keenly interested in University life. Notwithstanding the long hours spent on their own studies, I found them interested in Economics, Sociology and Philosophy. In student activities they play a prominent part both in the various study groups and in the world of sport. Their numbers are small, but not infrequently they hold Faculty Championships in some sport, as has been done by the students in the New Zealand School. Altogether, they are a live force in University circles, giving and obtaining much from the association.

<sup>5</sup> F. H. Bosworth & R. C. Jones. *A Study of Architectural Schools*. Scribner. New York. 1932.

#### STAFF

A comparison of staff actively teaching in various Schools of Architecture is given below. The Schools quoted have been chosen partly at random and partly by the student roll numbers to provide a proper perspective of different types of School.

##### STAFFING

School.	Student Roll		Staff	
	Full time	Part time	Full time	Part time
No. 1 ..	150	—	9	15
No. 2 ..	200	—	12	4
No. 3 ..	60	—	5	6
No. 4 ..	45	—	4	17
No. 5 ..	42	—	6	Not ascertained
No. 6 ..	36	11	5	9
No. 7 ..	60	40	—	22
No. 8 ..	45	—	4	17
Auckland	40	6	3	5

Full-time staff are expected to make teaching their primary activity. The amount of time given to teaching by part-time staff varies considerably, and comparison between Schools is therefore difficult.

The form of staffing adopted depends upon the attitude of the Director and, to some degree, that of the governing body of the Institution. School No. 2, for example, obviously believes in a full-time staff, while No. 7 is conducted wholly by a part-time staff. The

advantage of a part-time staff is the intimate contact with practice thus achieved, because these teachers are engaged in private practice as their major activity. On the other hand, full-time teachers make the school their life work, and are always available for conference and student criticism. Provided a reasonable degree of private practice is carried on by these teachers, no loss of contact is made with practice. It raises, however, the difficult question of how much private work a full-time employee might reasonably undertake. This matter is discussed elsewhere. The general method adopted is to carry out the main work of the School with full-time staff, and utilise part-time staff for subjects of a specialised nature.

An analysis of faculty strength to student numbers indicates about one full-time staff to 10 or 11 students, but such an analysis is dangerous when applied to Schools of small roll numbers because there is an irreducible minimum of staff for teaching a full professional course. Leading authorities with whom this matter was discussed estimated that an ideal roll number was about 50, and for this number a minimum staff of five full-time and seven part-time would be required to cover the curriculum properly.\*

#### THE STATUS OF THE STAFF

The teaching staff of Architectural Schools is usually composed of a Director, two or three senior lecturers

and a number of junior lecturers and studio assistants. These positions may be either full-time or part-time. In the Universities the senior posts are always full-time. In some art or technical schools the appointments are part-time, requiring 18 to 20 hours' attendance weekly for the senior posts. I could not help feeling that the Directorship at least of a School of Architecture should be a full-time post. I am sure the work of such Schools would benefit a great deal if the head spent more time in it. I make this statement with a full realisation of the brilliant work performed by some of the part-time heads of English Schools. It is not so much a criticism as a statement of fact.

### PROFESSORS

Most of the University Schools have at least one chair of Architecture, which is always held by the Director of the School. McGill and Toronto have two, one of whom is Director of the School. In Sydney the senior post in Construction is held by an Associate Professor. Most Schools give the senior Construction lecturer the status of an independent lecturer in charge of a subject. The growing complexities and importance of this aspect of an architect's training makes this position a very important one and the policy of creating chairs or associate professorships is bound to grow as it ensures the retention of a highly qualified man in charge of a vital section of the work.\*

Some of the English University Schools have no chair of Architecture. The department is then directed by a Lecturer-in-Charge. This is due to the comparative newness of architecture in Universities as a complete professional training. It is only a matter of time before the proper status is given to the heads of these Schools. Under present conditions the position is regarded only as a stepping-stone to the higher status of a professorship elsewhere. A brilliant head will not remain very long in a lectureship, even if it carries with it the Directorship of the School.

In Art and Technical Schools, with the exception of the Royal Technical College in Glasgow, Chairs of Architecture do not exist. The head of the School is a lecturer-director, and here again the position is regarded as a stepping-stone to the higher posts in the Universities. The Directorship of a School of Architecture involves a great responsibility. Architectural education is in fact a life work. The time has passed when architectural education could be regarded as a side line requiring the delivery of a few lectures or a few minutes' criticism of a student's work. To-day it absorbs the whole attention of many brilliant men, and it is essential for their positions to be given a status and security commensurate with the responsibility. This status exists in the Universities more than in other institutions, and accounts in some measure for the undoubted development of architecture as a course of University study.

### PRIVATE PRACTICE

All members of the teaching staffs, whether full-time or part-time, have the right of private practice. In Universities, full-time appointments stipulate that private practice shall not interfere with the teaching duties. In other words, it must not be the major activity of the teacher. In art and technical schools, the hours of attendance are usually stipulated. The private practice is very real. The knowledge possessed by the teachers in different fields is given quite freely to the public, and most members of the staff are either acting as consultants or carrying out smaller work on their own account. If the private work of a full-time teacher grows to such an extent that it interferes with his teaching he must either give up the teaching or some of his practice. In a sense the private work of architectural teachers is similar to the research carried out by other departments. It proves the ability of the teacher to practise what he preaches, and increases his prestige amongst the students in a way that nothing else could do. In addition, it prevents him becoming too academic-minded. It is regarded by the profession itself as so important that the R.I.B.A. stipulate that the whole teaching staff shall have this right before they will recognise the examinations of the School.

In the United States the School staff has a similar right of practice. It doesn't matter very much whether this is as a partner in a firm of architects or as a consultant or in some other way provided the teaching staff is kept constantly in touch with realities.\*

### SALARIES

A comparison of salaries paid is difficult. Individual salaries depend so much upon the terms of the appointment and these vary as has been stated. University posts are generally more valuable than non-University ones, especially in the higher grades. Professors' salaries are usually £1,000 per annum in England, £1,100 in the colonies. In non-University schools the Director receives up to £750 per annum, although in one case I found a Director of a fully recognised School performing the arduous duties expected of him for £450 per annum. In part-time posts, the value of the salary depends a great deal upon the amount of time he is expected to give to the work. In the lower grades, full-time lecturers receive from £350 to £750 per annum, depending upon their status. Part-time lecturers receive remuneration on a basis of time spent, usually £50 per annum for one hour a week lecturing, or £40 per annum for each hour if more than one lecture is given per week. Special lectures on particular aspects of architecture given by eminent architects in that field are often given in an honorary capacity. Studio assistants are usually paid on a lower scale, mainly because there is considerably less preparation work required. The actual amount depends largely upon the status of the teacher, and the phase of studio



work he is expected to teach. It is largely a matter for personal agreement. Many Schools reserve one post on the faculty for a graduate lecturer. This is reserved for a promising graduate who wishes to do post-graduate work. He may give some junior lectures, and assists in the general work of the department. He is allowed reasonable time for the post-graduate work he is doing and receives advice from the senior staff. He is given a nominal salary of about £150 per annum and the appointment is usually limited to two years. It should be noted that, as part of his work, he is expected to complete his post-graduate study. The salaries paid to the full-time staff of the New Zealand School appear to compare favourably with those quoted above, but, actually, this is not the case, because the New Zealand pound is worth only slightly more than fifteen shillings of English money. In effect this means that the salary paid in New Zealand is very little more than three-quarters of the amount paid for the same position in England. This is insufficient to attract able men to apply for vacant positions in New Zealand and is not fair to the existing staff, who took up their appointments when the exchange was practically at par. At present University salaries in New Zealand remain constantly at the same figure, irrespective of actual money value or its relation to living costs. To remedy this position it would seem necessary for the University Colleges in New Zealand to adopt the principle of adding a bonus to the existing salaries based upon the cost of living. The London University School of Economics has gone much further than this by adopting a scheme of family allowances increasing the amount

paid to the members of its staff by £30 per annum for each child from birth to the age of 13 and by £60 per annum for each child between the ages of 13 and 21.<sup>6</sup>

#### MOVEMENT OF STAFF

In England and the United States there is a greater movement of members of the staff from one college to another than in the Dominions. In the larger Schools, hardly a year passes without some fresh appointment, especially amongst the junior grades. The demands of practice or the appointment to a higher position elsewhere are constantly causing vacancies. This movement of staff is excellent for the Institution because it ensures a continual flow of new men with fresh ideas into the faculty. Unfortunately, the same opportunities do not exist in the colonies for advancement in a special educational field, and the staff tends to become fixed. This matter was discussed with the Universities Bureau of the British Empire, which has had the matter under consideration for some time. The scheme it has sponsored of notifying Dominion Universities of vacant positions deserves the full support of the New Zealand College Councils. The teaching staffs of Dominion Universities should have this matter constantly before them. It is not enough to merely be notified of vacant appointments. I believe it is necessary for the staff to bring before the English authorities by means of articles in University magazines and communicated papers a fuller realisation of the work being done in the distant parts of the Empire.

<sup>6</sup> *The Universities Review*, Vol. 9, No. 1, p. 43.

#### EQUIPMENT AND FINANCE

The equipment of a School of Architecture is neither elaborate nor expensive. Desks, a number of casts, an efficient library and a reasonable amount of space are all that is essential. Very few of the British Schools have their own buildings. This could hardly be expected yet owing to the comparative newness of Architectural faculties in institutions of higher learning. Liverpool has an efficient new building of which it is justly proud, containing studios, lecture rooms, exhibition and material rooms, and an excellent library. The Royal West of England School occupies a delightful Georgian building in Bristol. The great majority of the Schools occupy space vacated by other departments. Attic rooms are commonly used, but generally they are, if not elegant, adequate for their purpose. In the United States, many of the schools are larger, and some like Princeton, Harvard and the Massachusetts Institute, have buildings of their own. Others are working under great difficulties. No British School visited compared with the congestion of one institution in the United States where the students had overflowed the studios and corridors and were working quite cheerfully with

their boards propped up on the stairs. In another the School of Architecture was housed in the roof of the gymnasium. The nature of the work in an Architectural School is different from that in many of the other University departments, as most of the work is done in the studios. The School is, therefore, best situated in a separate suite or wing if it is not large enough or wealthy enough to have its own building. This permits better control, especially in the evening hours when other departments are closed, and enables the work to be done with a minimum of friction with other departments.

The New Zealand School compares more than favourably with others in respect of space. The studios are airy and are adequate in size for some considerable time to come.\*

#### THE LIBRARY

In common with every other subject of University study, Architecture needs an up-to-date library. The works of reference are often very large and contain many illustrations. They are, therefore, expensive.

Most schools do satisfactory work with two to three thousand volumes, but the older schools have many more. One institution had 40,000.\*

Departmental libraries for architecture are universal, and their location is always adjacent to the studios. In one or two Schools, the books were actually in the studies. This, however, creates difficulties of control. The departmental libraries are supplementary to the large college libraries. In the latter are placed books of wider interest than architecture, confirming the Auckland procedure of putting the Carnegie Art Teaching set in the main College library. In England the excellent city libraries are also used by the architectural students.

Spaciousness in the departmental library is essential because large numbers of students congregate there at one time, especially when the class design subjects are published. There needs to be ample table space, otherwise much wear and tear results from handling large reference volumes. It is not usual to allow these volumes to leave the School premises, but text-books and general reading matter can be borrowed for a stated time.

The common system of control is by a school secretary-librarian combining the school office work with the care and control of the books. In larger libraries a student librarian is added to assist the secretary, and, in very large libraries, one or more fully qualified librarians are engaged.

In the Dominions, owing to the impossibility of inspecting the well-known buildings of the old world, a large and representative library would seem to be more necessary than in England. The Schools in the colonies are very young and it takes time and much money to make their libraries efficient.\*

### BUDGETS

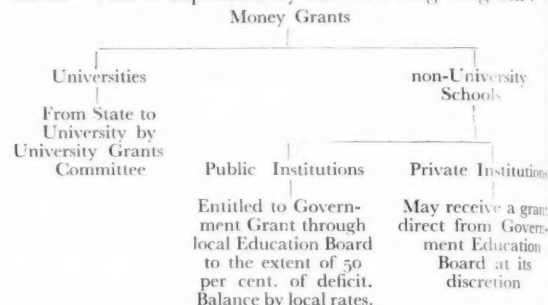
The British Schools of Architecture visited do not prepare detailed budgets. It is therefore impossible to estimate exactly the cost of architectural education. The usual reply to this question was: "I can tell you the amount paid in salaries and the amount of student fees, but all other expenses are by requisition to the college office." The college office can tell you the cost per student for the institution or the total expenditure for the year, but does not usually take out costs for individual departments.

In Auckland a typical budget supplied by courtesy of the Registrar shows receipts £2,478 from student fees and Government grant. Expenditure £2,400, including £2,150 for salaries and £250 for sundries, including architecture's share of administration. The department's roll number was 46 last year, giving an average cost of £52 per student. It is regrettable that comparisons with the other Group One Schools could not be made. Considering the very much stronger staff strength of these Schools, and the resulting increased salary bill, it would be safe to conclude that the cost per student is very low in New Zealand.

### GOVERNMENT AND LOCAL BODY GRANTS

Money grants to institutions teaching architecture in England are made in various ways, depending upon the type of institution. Universities receive a sum allotted annually by the University Grants Committee, a body

set up by the Government and allocating direct the funds available. Art and technical colleges are supported partly by grants from the Government Education Board through the local Education Board and partly from local rates. Independent Schools may receive grants direct from the Government Education Department. This is explained by the following diagram:—



All non-University institutions are subject to inspection by Government Education Board inspectors. When expansion is desired all the parties usually confer before the proposal is proceeded with. Generally, sound proposals for staffing or further equipment are agreed to with little difficulty. I gathered the impression both in University and non-University Schools that nothing approaching the poverty of the New Zealand colleges existed in England. There was a general feeling that if any department could put forward sound proposals for improving or extending its public service at reasonable cost, there was usually little difficulty in obtaining approval.

### STUDENT FEES

The tuition fees paid by students vary a great deal. The highest are those paid at the Architectural Association, London, namely, 72 guineas a year for the first three years and 48 guineas each for the fourth and fifth years. The lowest are at Sydney Technical College, where the student pays 4 pounds for the first year, 5 for the second and 6 for each of the remaining years. Generally speaking, University tuition fees are higher than non-University owing to the greater assistance given to the latter from the public purse. The former are usually 30 to 35 pounds per annum for the first three years and £22 10s. each for the fourth and fifth years. The latter are from 20 to 25 pounds per year. The fees at the two Canadian Universities are 225 and 260 dollars per annum respectively.

In some schools the tuition fees include examination fees. In others there is an additional charge of 1 or 2 guineas per annum. Most schools charge a special fee up to 5 pounds for a supplementary examination for candidates who have failed in the normal class examination.\*

\* For full details of fees see appendix (not included in this publication).

## CONCLUSION

It has been my purpose in this account of Architectural Education in the British Empire to give a bird's-eye view of the system so that the individual methods of any one School can be checked with the system as a whole. There has been very little written material to draw upon. A number of short papers have been given from time to time, and invaluable reports made by select committees of the R.I.B.A. These have been carefully studied, but the bulk of the information has been obtained from personal visits to the Schools themselves. Some aspects may have suffered from generalisation. The sections on student statistics and the cost of architectural education seem to me to require more detailed research before definite conclusions can be made. I have been anxious to avoid tediousness and have been particularly careful to make my recommendations on facts rather than conjecture.\*

In the early days of architectural training, a feeling prevailed that an architect was a kind of eccentric artist who might be excused if he worked at ridiculous hours or wore ridiculous clothes. To-day it is realised that those charged with the heavy responsibility of designing and directing the erection of our buildings must have personality. They must be endowed with qualities of leadership. A knowledge of law and of commerce must be added to their artistic ability together with a fair share of what is termed "common-sense." This is what the Schools mean when they demand that their graduates shall have the ability to "think."

This same quality of clear thinking should be applied to the School system. The Schools have not supplanted office training. They merely precede it by an academic training which they alone can give. It is a training as necessary for success as actual experience in office practice. It is for this reason that the British Schools are opposed to a longer academic training than five years. This is long enough to teach the academic side. The office must then do its share in equipping the student for practice.

There are some who believe that the stipulated one year's office training is insufficient for practice. It does not follow that every student does practice immediately

that year is completed. In fact many professional men will tell you that fully ten years elapse from the date of entering college to the commencement of an independent practice. After all, age and experience does count in the minds of the public when they are choosing their architect, dentist or doctor. Furthermore, it must be realised that the stipulation of one year's experience is required for eligibility for election to a professional Institute—not for the practice of architecture. Under British law, anyone can design buildings.

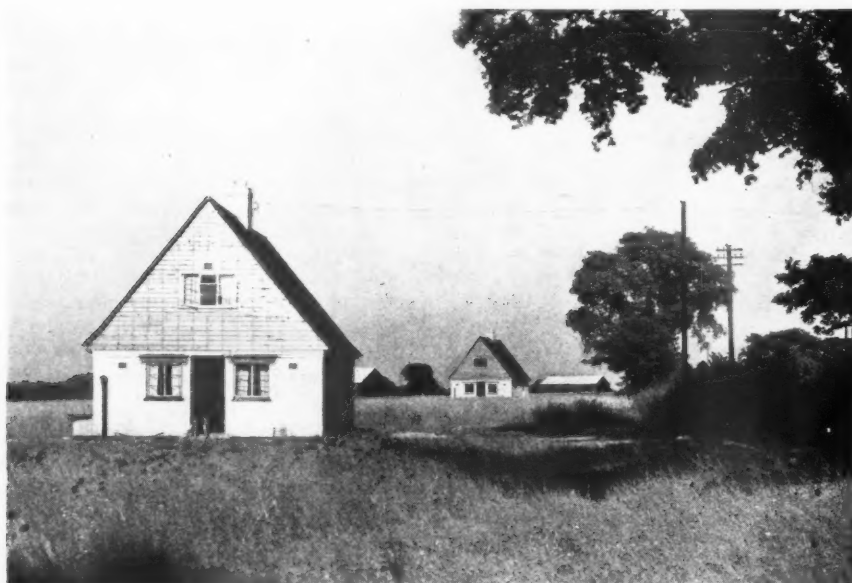
I am perfectly satisfied that the Schools of Architecture throughout the Empire are giving great service to the community. They are not only meeting the needs of vocational training, but also stimulating interest in civic development, in Art and many other aspects of community life. Bosworth and Jones in their book on Architectural Schools in the United States state:

"Few Universities, however large, have architectural schools in them without being conscious of their presence and their influence."

In the British Empire, Architecture as a course of study is increasing steadily as more and more students appreciate the educational value of its classes. Notwithstanding its short history, I believe the influence of the University School of Architecture in New Zealand has already been felt in the community, and, given reasonable facilities for development, it can and will play a very important part in the development of the Dominion. The School system of architectural education has come to stay. Its methods will change as conditions warrant and a larger body of brilliant men give their lives to a study of its teaching. The world may change in its methods of finance or in its social structure. Different parties will no doubt govern its destiny, but Architecture—good Architecture—is essential for its wellbeing.

The time will come—and I do not believe it is far distant—when college training will be recognised as just as essential for the practice of architecture as it is for medicine and law. Then Architecture will come into its heritage.





*Houses on a full-time holding at Newbourn, Suffolk*

## THE HOUSING WORK OF THE LAND SETTLEMENT ASSOCIATION

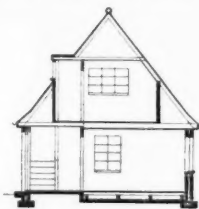
*Architects: Messrs. Pakington & Enthoven [FF.] and  
Mr. A. G. S. Fidler, M.A., B.Arch. Liverpool, Rome Scholar [A.]*

The housing work of the Land Settlement Association is of interest to architects generally not only because it is a type new to this country but also because it indicates a social experiment which may in time do much to mitigate the evils resulting from irregular employment in industry. The tendency to adopt a short working week and the practice during periods of depression to employ men on a part-time basis, or to stand them off altogether, are apparently an inevitable condition of industry. If workmen have their own smallholdings on which they can grow food for their families or for sale, the evils of irregular employment are lessened. Work on the land tends to maintain a balance of livelihood in fluctuating industry. This system, if developed further, may result in a combination of agriculture and industry making for more settled conditions than have hitherto obtained in industrial areas. It is at present being strongly encouraged in Germany. Therefore the work of the Association can be considered as much more than the mere relief of present distress in the Special Areas.

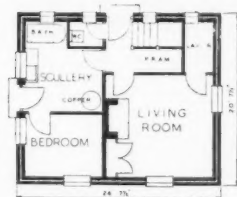
The Land Settlement Association was formed in 1914 by the Government "to carry out an experimental scheme for the provision of smallholdings for unemployed persons, with the financial assistance of the Government." The scope was at first small, but the appointment of the Commissioner for the Special Areas of England and Wales reoriented and greatly expanded it. The Commissioner, by agreeing to meet the cost of settlements, in effect made the Association his agent. Up to the present, by far the larger part of the Association's work has been on the Commissioner's schemes. The original plan, however, still continues to be developed, under which families from districts other than the Special Areas are settled on the land. Here the Association works in co-operation with the county councils and county borough councils, who have power under the Small Holdings Act 1926 to purchase land and create settlements.

The Association has full control of the whole work. In Special Area schemes it purchases estates and develops them as smallholdings, erecting the necessary houses and

A typical three-bedroomed house at Newbourn, Suffolk. The walls are cream-coloured Burnell brick. Gables are framed and covered with corking felt and chestnut weatherboard. Roof, plain tiles. Floors, board and granolithic.



CROSS SECTION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

outbuildings, and doing all road and fencing work. It selects the men and trains them, providing working capital and equipment on easy terms of repayment. It operates a central farm on each estate and runs a co-operative marketing business.

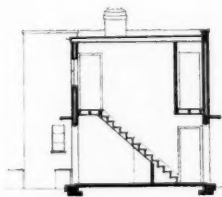
Three types of holding are at present being created :

- 1) Full-time holdings. (2) Part-time (group) holdings.
- 3) Cottage homesteads.

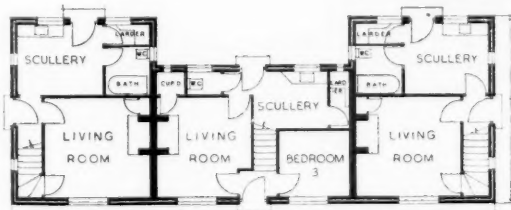
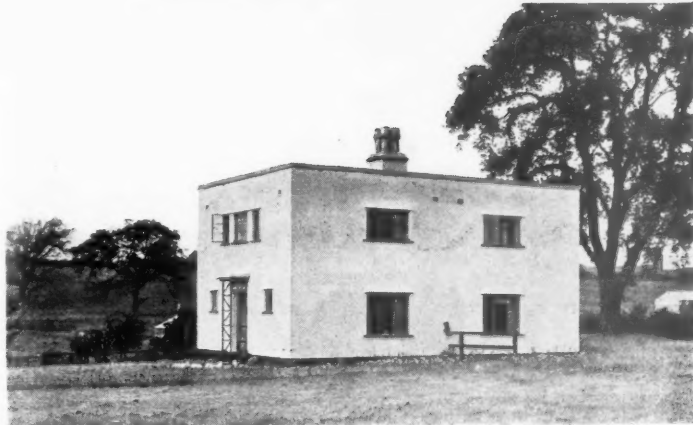
Full-time holdings vary in size from 3 to 10 acres and are designed to provide the occupiers with an economic livelihood. They are equipped for the production of market garden produce, pigs and poultry. Each has its own dwellinghouse and outbuildings, and is a self-contained unit. It is, however, customary to plan the crops at the back of the holdings and unfenced so that they can be all ploughed together. Otherwise site



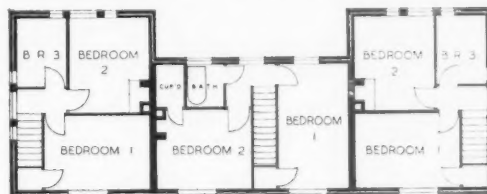
A pair of semi-detached houses at Crofton, Cumberland. The walls are of hollow-tile rendered in white cement and the roofs are of ply bitumen sheeting. All photographs, except those of the models, illustrating the article are by Mr. E. R. Jarrett [A.]



CROSS SECTION

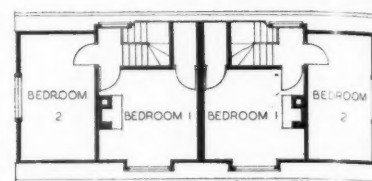


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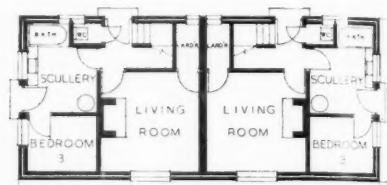


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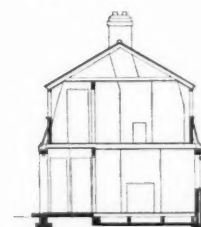




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*Above, a detached house, and, below, semi-detached houses at Great Yeldham, Essex. Walls of colourwashed flettons and gables of creosoted deal weatherboarding*

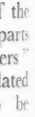
planning of the estates as well as choice of estate have hitherto been governed primarily by an agricultural point of view. Necessities have been the vicinity of potential markets and soil suitable for smallholders' crops. Since the houses required road access they tended to be strung at wide intervals along the frontages of existing roads. What has been hitherto looked at almost entirely as an agricultural problem is now seen to be also a planning problem and later estates are being more consciously planned.

It has not been the aim to create new communities,

but to absorb the settlers into the existing life of the area. Since the settlers often come from distant parts of the country, the creation of a colony of "foreigners" would be almost inevitable were the scheme isolated from the neighbourhood. Clearly this had to be avoided.

Each estate possesses a central farm, usually an existing building altered as required, which is in effect a service department for the group of holdings round it. Here are kept communal implements, bulk feeding stuffs, etc., and outgoing produce is graded and dis-

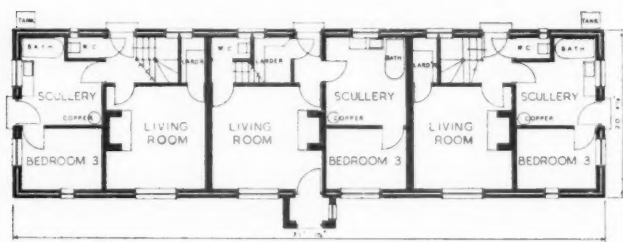




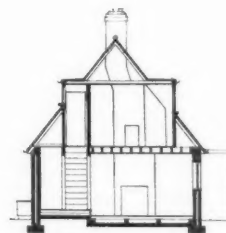
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CROSS SECTION

*A group of three-bedroomed cottages at Fulney, Lincolnshire. The walls are of rustic flettons, the roof plain tiles. This estate specialises in flower growing*



patched. This organisation enables the smallholders to compete on even terms with large commercial market gardens. The Association is now probably the largest single supplier of market garden produce in the country. The general direction of each estate is under the control of a Warden, who lives at the farm. In some cases existing farm cottages have been reconditioned for the use of the farm staff.

So far 25 estates, covering 11,000 acres, have been established. The majority of the houses on these estates have been designed by Messrs. Pakington and Enthoven. The principal requirement of their work

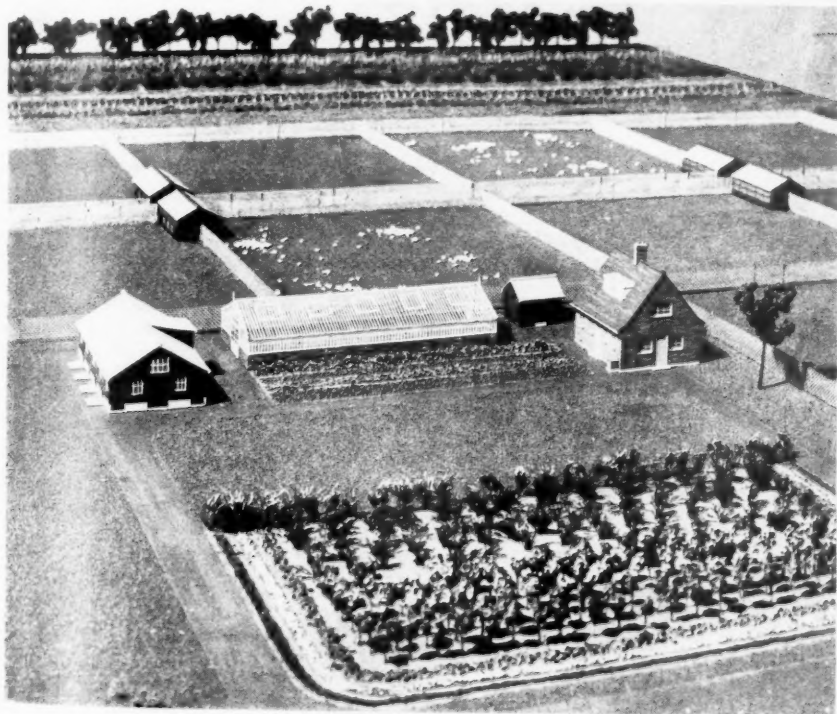
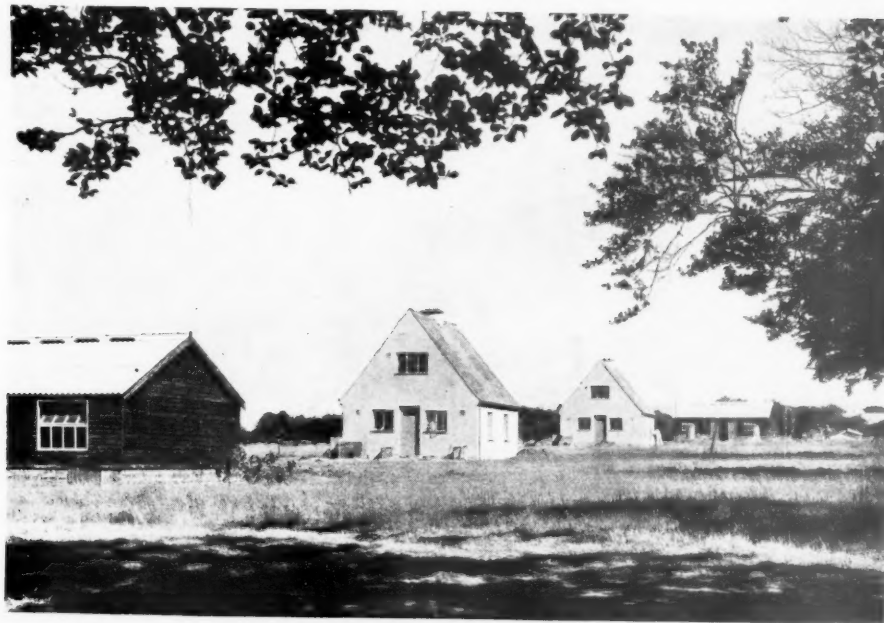
has been to provide adequate accommodation as cheaply as possible. This accommodation is according to the requirements of the Housing Act 1935. The experience of the architects is that this is obtained most cheaply in a structure having two bedrooms upstairs and the third downstairs, the eaves coming down to first-floor level. At first houses were built semi-detached for reasons of economy, but for social reasons this has now been abandoned in favour of detached houses. Four-bedroomed houses were provided in a ratio of one in ten of three-bedroomed, but the Commissioner for the Special Areas now requires the proportion to be one in six.

Several discoveries on small but important points of planning were made. It was first thought only one external door would be necessary, some housewives saying that they never used the front door. The main demand, however, is now for two doors. The bath was first placed in the scullery (as shown on some of the plans here reproduced), but a separate bathroom was asked for. This has generally been kept on the ground floor so that the men coming in dirty from working on the land do not carry dirt upstairs. Nevertheless, some housewives have asked to have the

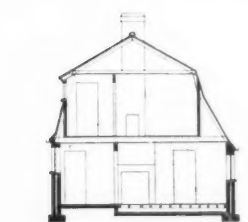
bathroom upstairs, and it is shown there on some of the plans. Again, the copper was first placed in an outhouse but is now fixed in the kitchen. A large oven is necessary for families from the North Country as they are accustomed to bake their own bread. Many of these details may appear unimportant, but they are in fact important to the tenants and therefore to the success of the scheme.

The materials chosen have been the cheapest of reasonable quality obtainable locally. The walls are generally of cavity brickwork, the roofs of plain tiles, and the gable ends boarded. This last is found to be

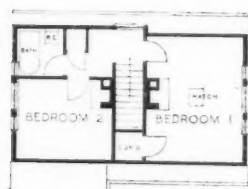
*Houses and outbuildings on full-time holdings at Dalston, Cumberland*



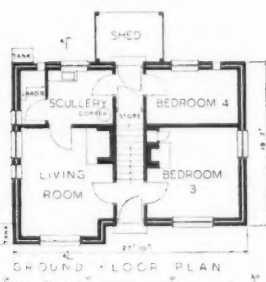
*Model of typical full-time holding showing the standard aimed at by the Association*



CROSS SECTION AA



FIRST FLOOR PLAN



GROUND FLOOR PLAN

economical, the gables being filled with stud framing and covered with a sarking felt under the boarding. The flat-roofed scheme illustrated on page 77 was built of hollow blocks rendered, the roof being surfaced with bituminous sheeting: this construction was the cheapest for the particular locality of the scheme.

The lowest cost per three-bedroomed house was £271, a typical cost being £330. Four-bedroomed houses cost £400. These prices were mostly obtained before



*Cottage on full-time holding at Elmhurst, Leicestershire*

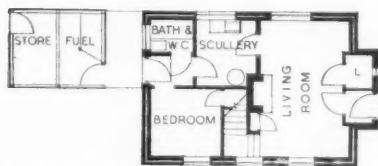
the recent rise in building costs. The Association allow an annual maintenance charge of £4 10s. per house or £13 per holding, including glasshouses and piggeries. The architects have not, however, been responsible for the provision of these farm buildings.

*Part-time (group) holdings* do not present an architectural problem and hardly a town-planning one. They are in the nature of communal allotments for unemployed or partly employed men. These holdings are normally grouped in lots of twelve to twenty, each about one-third of an acre. The scheme was taken over from the Society of Friends.

*Cottage homesteads* are intended to meet the problem presented by the long-unemployed man with an adolescent family. If such a family is transported to a new district where there is a demand for juvenile labour in light industry, the future of that family may be to some extent ensured without break-up of the family life. The cottage homestead with half an acre of land provides the answer to the problem. The families chosen are those of men over fifty years of age for whom the prospects of employment in the

Special Areas are poor or non-existent, and containing at least three adolescents. The cost of the cottage homesteads is borne by the Commissioner.

So far four estates have been purchased and are being developed under the control



GROUND FLOOR PLAN

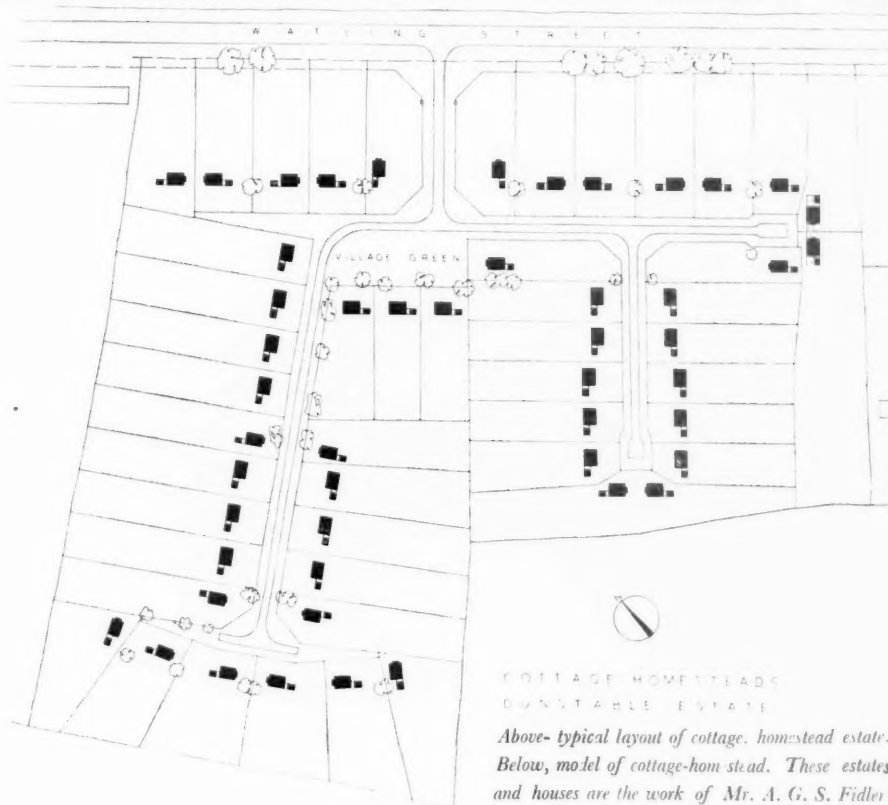


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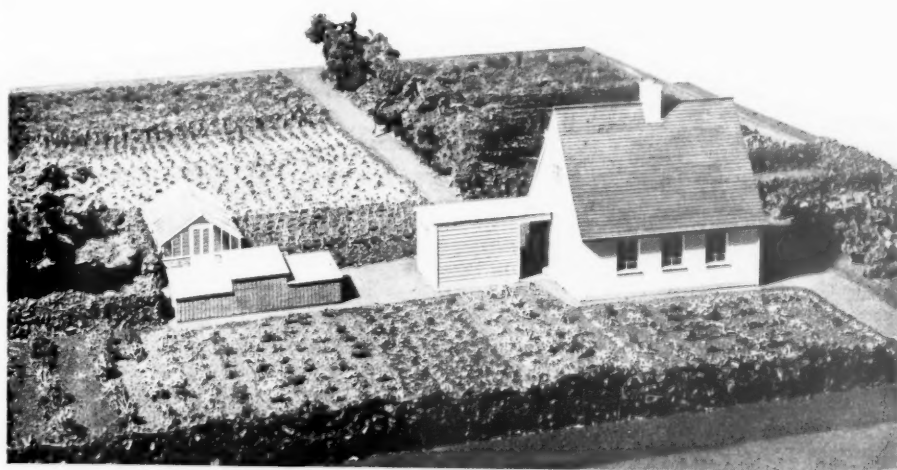
SCALE OF FEET

*Design of house for cottage homesteads. See photograph of model on opposite page*

of Mr. Fidler, who has now become responsible for all the Association's building work. The smaller size of holding makes possible, and even demands, closer consideration of site planning than do the full-time holdings. Inevitably also they tend to form something of a community. The plan of the Dumstable scheme reproduced on this page shows several interesting features. The requirement of the Restriction of Ribbon Development Act that a separate access road be provided has been met by placing the access road some way from the main road and putting houses on both sides of it. Also, actual road work is kept to a minimum, wide grass verges being provided between fences. These verges are planted with trees to improve the appearance and grouping of the scheme as funds permit. An effort has also been made to keep the holdings of reasonable shapes, as nearly rectangular as possible. A piece of land forms a small green and on this a club-room may in time be erected. In the houses themselves the attachment of outhouses to the main structure makes for an orderly appearance, but the Public Health Acts prevent the combination of all farm buildings on each holding as is the custom in Germany.



*Above- typical layout of cottage, homestead estate.  
Below, model of cottage-homestead. These estates  
and houses are the work of Mr. A. G. S. Fidler*





## REVIEW OF CONSTRUCTION AND MATERIALS

*This series is compiled from all sources contributing technical information of use to architects. These sources are principally the many research bodies, both official and industrial, individual experts and the R.I.B.A. Science Standing Committee. Every effort is made to ensure that the information given shall be as accurate and authoritative as possible. Questions are invited from readers on matters covered by this section; they should be addressed to the Technical Editor. The following are addresses and telephone numbers which are likely to be of use to those members seeking technical information. There are many other bodies dealing with specialised branches of research whose addresses can be obtained from the Technical Editor. We would remind readers that these bodies exist for the service of Architects and the Building Industry and are always pleased to answer enquiries.*

*The Director, The Building Research Station, Garston, Nr. Watford, Herts. Telegrams: "Research Phone Watford." Office hours, 9.30 to 5.30. Saturdays 9 to 12.30.*

*The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks. Telephone: Princes Risborough 101. Telegrams: "Timberlab Princes Risborough." Office hours, 9.15 to 5.30. Saturdays 9.15 to 12.*

*The Director, The British Standards Institution, 28 Victoria Street, London, S.W.1. Telephone: Victoria 3127 and 3128. Telegrams: "Standards Sowest London." Office hours, 9.30 to 5. Saturdays 9.30 to 12.30.*

*The Technical Manager, The Building Centre, Ltd., 158 New Bond Street, London, W.1. Telephone: Regent 2701, 2705. Office hours, 10 to 6. Saturdays 10 to 1.*

### AIR CONDITIONING

A bulletin of the University of Illinois\*, recently received by the R.I.B.A. Library, consists of a very full report of a Conference on Air Conditioning. This is of particular interest, partly because the conference was non-technical (in intention, if not wholly so in actuality) and partly because the practice of air conditioning is further advanced in the United States than in this country.

Air conditioning was originally an English invention and was developed from plenum ventilation. While its progress in this country has been gradual, in America it is now being used widely, not only in theatres and other auditoria but in hotels, offices, restaurants, apartments and even in private houses. This is doubtless because it provides equable interior conditions in a climate liable to extremes of temperature and humidity. During heat waves, theatres and restaurants equipped with air conditioning are found, as might be expected, to attract a larger public than those not so equipped. Consequently not only does it show some revenue-producing quality, but is becoming essential in such buildings under the stress of competition. It has a further advantage in allowing of adequate defence against external noise in such buildings as hotels. With air conditioning, double windows, heavy enough to reduce the entry of street noises below the level of perceptibility, can be fitted. An English example of this in the Berkeley Hotel, London, has been described in this section of the JOURNAL†.

In spite of the fact that the British Isles have a more equable climate than that of the United States, the use of air conditioning is likely to extend in this country, particularly in public buildings of all types. In the sooty atmospheres of English cities it has the further advantage of reducing the entry of dirt into the building and thus extending the

life of decorations, fabrics, etc. It is desirable, however, that the building in which it is installed should be specially designed for its use from the beginning.

### COMFORT CONDITIONS

That the scope of air conditioning has now gone far beyond the mere supply of clean, warmed (or cooled) air was made clear in the opening paper of the conference, read by Arthur C. Willard, President of the University of Illinois. He said:—

Air conditioning is *not a new discovery* but the application of principles, long known to the heating and ventilating engineer and the physiologist, to the problem of keeping people comfortable by artificial means through the proper control of the atmospheric environment. Moreover, air conditioning in this latitude should provide for a *year round service*, and hence we must be prepared to deal with both winter and summer conditions.

Briefly stated (1) a complete system of air conditioning for *winter service* should provide for the *controlled* production of *heat and humidity*, with the *removal* of a large part (75 per cent. or more) of *dust and dirt* floating in the air; and (2) a complete system of air conditioning for *summer service* should provide for the control or regulation of air temperature or of humidity or of both within certain rather wide limits by either *air cooling devices* of various types or by *dehumidifiers* or by both. By reducing the humidity, that is, *condensing* or *absorbing* the *moisture* in the air, the amount of actual air cooling may be greatly reduced. In any case, air cooling should be moderate in amount.

Our sole purpose and our ultimate objective in the development of both winter and summer air conditioning is to *make human beings comfortable*. We are not interested essentially in temperatures, humidities, air motion, dust and bacteria counts, and other indices of air conditions, but in human comfort. We know to-day that this involves, during much of the year in this country, the maintenance of, first, a proper atmospheric environment, and, second,

\* Papers presented at the First Annual Conference on Air Conditioning held at the University of Illinois. *University of Illinois Bulletin*, 13 October 1936. Vol. xxxiv, No. 13. 50 cents.

† R.I.B.A. JOURNAL. Review of Construction and Materials: Successful Exclusion of Noise. 9 May 1936, pp. 714-15.

a proper physical environment, both of which must be agreeable to the occupants. The former depends largely on operating equipment, while the latter depends on the structure or building surrounding the occupants who are to be made comfortable. Up to the present, much has been done and great interest has been shown in the equipment, while the reverse is generally true in the case of the structure. In my opinion, the second factor is fully as important as the first, and may completely determine the type, the size, or capacity (including cost), and the operating cycle of the equipment, as well as the operating charges.

In discussing "human comfort" Mr. Willard makes clear that comfort prevails whenever the heat loss from the body is exactly balanced by the heat production of the body. He states that the heat production of a human body at rest is upwards of 400 B.T.U. per hour, of which 210 B.T.U. is normally lost by radiation, 90 B.T.U. by convection (in still air) and 100 B.T.U. by evaporation without sensible perspiration. He goes on to say:—

Hence our problem is to create and maintain an *atmospheric and structural* environment in which the body heat losses will occur by the methods and in the amounts just indicated. It is apparent that radiation which is quite independent of the atmospheric environment but wholly dependent on the structural environment disposes of *more than half* of the body heat production when the individual is at rest and comfortable.

Hence, as I indicated at the outset, we should give far more attention than in the past to the construction and insulation of the walls, floors, ceilings and windows of our houses when we are planning to air condition them for human comfort. Such attention is even more important for successful winter air conditioning than it is for summer air conditioning, and the air-conditioning system of the future must provide for both conditions, or all year round service.

These facts are elaborated in a paper by Mr. F. C. Houghten, Director of the Research Laboratory of the American Society of Heating and Ventilating Engineers. He says:—

During the past fifty years the average span of human life has been greatly increased, largely through the development and dissemination of knowledge concerning the sanitary control of the food and water supply, including the proper disposal of sewage. As we examine the facts we find that this improvement in health and increase in the length of life has resulted in a great measure from the control or elimination of diseases of the digestive tract, and as a result we find to-day that the outstanding ailments are diseases of the respiratory tract. With similar vigilance applied to the control of the air we breathe, and in which our bodies are at all times bathed, through air conditioning, it is not too optimistic to anticipate a similar increase in the average span of life through the control of diseases of the respiratory tract. In this respect, air sanitation or air hygiene are terms synonymous with air conditioning whose true significance might be better understood. Thus viewed, air conditioning is an important factor in our daily life, and any man connected with its development may view his calling as a noble one.

Air conditioning may be defined as the control of any or all of the physical or chemical properties of the air in some enclosure for a purpose. Air conditioning for health and

comfort involves the control of those properties of the air which affect comfort and health. And a knowledge of these physical or chemical properties and their effect on the human system is absolutely necessary for a proper understanding of comfort air conditioning. To practice air conditioning, or to be engaged in the installation of air-conditioning equipment in buildings, a man must not only be a good engineer, but he must also have a comprehensive knowledge of physiology and the physiological reactions of the body to its atmospheric environment.

The properties of the air, or the air conditions which affect comfort and health, are, in the order of their importance (1) the temperature of air (2) the moisture content of the air (3) the motion of the air (4) the dust content of the air (5) the freedom of the air from odours (6) the freedom of the air from other harmful vapours, gases, bacteria, or other harmful substances. The temperature, moisture content, and motion of the air, combined, determine the personal feeling of warmth; or, in other words, these three qualities of the air determine the rate at which heat is given off from the body to the surrounding air under any given condition of clothing and activity.

Mr. Houghten then discusses the importance of moisture content of the air in the establishment of comfort conditions and also introduces a third factor of importance, namely, air movement. Extensive research during the past decade has, he says, resulted in knowledge concerning the relative influences of these factors and there has been established an "effective temperature scale" which takes into account temperature, relative humidity and movement of the air. An effective temperature chart is reproduced. As an example, for winter heating a 66 degree "effective temperature" with a tolerance of about 2 degrees has been found to be comfortable to most people. This standard effective temperature may be had with 66 degree dry-bulb and 100 per cent. relative humidity, 70 degree dry-bulb and 50 per cent. relative humidity, or 74 degree dry-bulb and 10 per cent. relative humidity.

He also makes the following additional points: People become partially acclimatised to seasonal outdoor temperatures, so that indoor effective temperatures require to be varied. A 66 degree effective temperature in winter air conditioning may be increased to 73 degrees in the summer. Also, since it costs money to condition air, experiments have been made to discover how far the quantity of outside air introduced by the plant can be reduced. It has recently been proved that carbon dioxide is not the controlling factor as regards health and comfort in ventilation. It has been found possible to reduce the amount of outside air per person per minute from 30 cubic feet (as required by old American school building regulations) to as low as 10 cubic feet. He also says that psychological influences are not unimportant; for instance, undue noise from the equipment or even the sight of unpleasant-looking equipment may largely defeat advantages in comfort obtained by the installation of air conditioning.

## HAY FEVER AND AIR CONDITIONING

The use of air conditioning to give relief to victims of hay fever and asthma is the subject of a remarkably interesting paper by Professor W. H. Welker, head of the Illinois University College of Medicine. He states that the number of persons in the United States who regularly suffer from hay

fever has been estimated at as high a figure as four million and that various investigators have estimated that from 15 to 40 per cent. of hay fever cases eventually develop asthma.

It has long been known that hay fever is caused by pollen and it has recently been definitely established that the pollens of the common and giant ragweed\* are responsible for a very large percentage of it in America.

Several experiments, described by the Professor, have shown that air conditioning incorporating filters to trap the pollen gives immediate relief to sufferers, though it may take as many as four or five days for the symptoms to disappear. Naturally these are liable to recur when the patient leaves the air-conditioned room or building, but he at least has a sanctuary to which he can return for rest and sleep. The filter used in the experiment was a cheap, coarse-fibred cellulose paper. Manufacturers are now marketing in America apparatus that can be connected to the window of a room by which the air is drawn in through a filter. Full air conditioning with its thorough washing and screening of the air is naturally just as effective and indeed gives additional comfort where the moisture content of the air is reduced. The Professor states that the public have discovered for themselves that certain hotels, stores and theatres equipped with air conditioning give relief to hay fever addicts and that "these buildings have become literally hay fever resorts."

#### PHYSICAL FACTORS AFFECTING COMFORT

Professor A. P. Kratz, Research Professor of Mechanical Engineering, in his paper under the above title, deals with technical aspects. He bases his arguments on the following general remarks:—

The proper function of a heating or cooling plant is, therefore, not to warm or cool the body, but to produce an environment in which the body is enabled to lose an amount of heat corresponding to that generated, without any conscious bodily adjustments having to be made.

He goes on to say that since much more heat is lost from the body by radiation than by convection or evaporation, the temperatures of surrounding walls and objects have an important bearing on the comfort of the individual, much more so than is generally recognised. He points out that rooms having poorly insulated walls require appreciably more heat to give comfort conditions inside when they are cooled by wind outside. Large cold glass surfaces may also be a cause of discomfort and in extreme conditions he advocates the use of double windows. These statements are illustrated by examples and calculations.

Another interesting line of investigation pursued by Professor Kratz is an analysis of the differences often met with in air temperatures at different levels in a room heated by radiators. In one case quoted, a radiator beneath a window gave 55 degrees at the floor, 70 degrees at the 5 feet level and 77 degrees at the ceiling. In passing it may be noted as not surprising that children, living at a lower air level than adults, not infrequently suffer from the effects of cold when the adults are unaffected.

Finally he says that considerable effort has been directed towards the design of the heating or cooling plant, and, until recently, not enough attention has been paid to the structure housing this plant. Features of good construction such as air-

tight walls, heat insulation, weather-stripped windows (that is, fitted with draught excluders) and double windows all have significant bearing on comfort.

#### AIR-CONDITIONING EQUIPMENT

A paper by Mr. E. L. Broderick, Research Assistant in Mechanical Engineering, brings out the fact that there is now available a wide range of plant for air conditioning much of which is specially designed and cheaply produced for use in dwelling-houses. In one type, units are placed in each room consisting of a fan, filter heating and cooling coils, humidifier and control apparatus. The units are fed with hot water from a central boiler in the winter and with cold water in the summer. The water may be either drawn from a cold source such as a well or main or cooled by refrigeration. One design ingeniously uses a steam jet and vacuum for cooling.

The other type, consisting of a central plant with ducting to the rooms, is of several varieties and is described in some detail. The principles on which these plants work are well known to English readers.

#### CONCLUSIONS

A study of this series of papers appears to bring forward the following principal facts:—

(1) Heating, ventilation and insulation are so closely inter-related as really to form one subject. Typical present-day structures often fail to give proper comfort conditions because these three factors have not been considered together. It may be observed in passing that researches at present being conducted by the Building Research Station are based on this viewpoint. Building practice is, however, a long way behind research, doubtless from lack of co-ordination. Heating is the province of the engineer and insulation that of the architect, ventilation being not infrequently left to chance and badly fitting windows.

(2) Comfort conditions represent a large field much of which still remains to be explored. Progress is slowed by a certain wilful ignorance on the part of persons (some of them architects) who think that irregular heat distribution and draughts from open or ill-fitting windows make for health and hardiness. Many also hold that our inadequate methods are good enough for the English climate. There is also a delusion that air conditioning in some way "cooks" the air. There is, however, not much doubt that in the immediate future there will be a notable pursuit of comfort conditions with all heating systems, whether radiators, panels or air conditioning.

(3) In a great many types of building, air conditioning has an appeal on financial grounds to building owners. An even warmth in winter, coolness in summer, absence of dust and dirt, protection from external noise will often be factors of greater importance to them than the fuel bill.

(4) Application of air conditioning to dwellings cannot be long delayed in this country. Demands for small apparatus will result in its production at reasonable prices. The open fire is fast disappearing and with it the necessity for inducing draughts through the crevices of windows and doors. It is surely a logical step, specially in smoke-laden city atmospheres, to have windows hermetically sealed in the winter and to provide warmed and filtered fresh air throughout the building from a controlled central plant.

\* The same family as the English ragwort.

## AN AIR-CONDITIONED HOTEL

Since the report of the Convention on Air Conditioning at the University of Illinois was received the new Queen's Hotel at Leeds has been opened to the public. This is the first fully air-conditioned hotel in the country. It is a particularly fit subject for air conditioning both on account of the industrial, soot-laden atmosphere of the city and, in respect of protection against noise, of its situation with a railway station on one side and the City Square on the other. It will be seen from the following description how air conditioning and defence against noise are interlocked as problems.

The architects of the hotel were Messrs. W. Curtis Green, R.A., & Partners [F. and A.], in collaboration with Mr. W. H. Hamlyn [F.], chief architect to the L.M.S. The building, which has ten floors above ground, is on a congested site which did not permit much to be done in the way of defence against noise by planning. It contains 200 bedrooms each with its own internal bathroom. The public rooms consist of a large banqueting hall to seat 500, a smaller banqueting hall, a grill room, a French restaurant, a brasserie, private dining rooms, lounge, writing room and American bar. Separate services adjoin the dining rooms and restaurants, but are served from a common kitchen, which is in the basement.

The whole interior is air conditioned, though this is not the principal means of heating, which is by radiators. The air-conditioning delivers washed air, warmed to a comfortable temperature, but the radiators supply a large proportion of the necessary heat. This dual system has two advantages. The placing of radiators under windows neutralises the inevitable draughts from the cold glass surfaces which air-conditioning alone would not prevent. It also enables the occupant of a bedroom to vary the warmth of a room to suit individual requirements, a matter of some importance in a high-class hotel. Cast iron sectional radiators are used generally, except in the public rooms, where flat steel panel radiators are set flush in the walls. These last are thermostatically controlled.

The two lower floors of bedrooms, at which the noise is liable to be greatest because of reflection from structures opposite, are fitted with double windows. These are steel casements, spaced about four inches apart, secured by espagnolette bolts which shut the casements firmly against their frames. The internal placing of the bathrooms and the double-doored lobbies protect the bedrooms against corridor noises. Inspection at the opening ceremony showed these arrangements to be very efficient.

The air supply to bedrooms enters near floor level and is extracted near the ceiling on the opposite side. The extract fan is in the bathroom and the exhaust air passes into the large shafts containing the plumbing and service pipes, whence it is discharged at roof level. In the public rooms the air is distributed partly upwards and partly downwards.

There are seven separate ventilating plants serving (1) The main banqueting hall. (2) The small banqueting hall. (3) The French restaurant, grill room and other food rooms. (4) The lounge, offices and public rooms generally. (5) Half

the bedrooms. (6) Half the bedrooms. (7) The kitchen and services. It will be realised that this sub-division makes for economy in working. The total volume of air delivered is 10,250,000 cubic feet per hour.

In each plant the air passes in turn through a pre-heater, water sprays (removal of dust), oil filter and fabric filter (removal of soot), and then through the main heater. Provision is made for cooling the washer water by refrigeration at a future date. The omission of this for the time being prevents the system from being described as air-conditioning in the fullest sense of the term.

The kitchen plant gives sixty air changes per hour. To make this high rate possible in winter without requiring an immoderately large heating unit, the exhaust fans from some of the other systems feed the intake of the kitchen system. The bathroom and lavatory extract fans, however, discharge direct to the outside air and are equipped with duplicate motors to obviate risk of breakdown.

At the opening ceremony only careful observation revealed the efficiency of the air-conditioning. There was an entire absence of draught or uneven warmth in any part of the public rooms. During the official luncheon, thermometer readings taken by an observer in the middle of the banqueting room showed a total variation of 2 degrees Fahr. There was also a complete absence of tobacco smoke haze.

The whole heating and ventilating plant is not situated in the hotel structure but in an old disused river conduit, known as "the Goit," nearby. This has effectively prevented the transmission of noise from the plant to the hotel structure. The ducts are lined with asbestos insulating board which serves the double purpose of reducing the fall of temperature in the air passing along them and of preventing drumming or transmission of sound. It is interesting to note that when the air-conditioning plants are not in use, the air intakes are closed by roller shutters, because it has been found there is then a natural circulation of air at such a speed that the filters do not operate properly.

The heating plant of the hotel consists of six boilers, with a seventh as stand-by, of automatic gravity feed type, each rated at two million B.T.U.s per hour and burning coke. The attendance required consists of replenishing the magazines every twenty-four hours, daily clinkering and removal of ash. The coke is supplied by a system of seven conveyors feeding from an intake bunker to a main bunker holding 180 tons and thence distributed by a new type of conveyor to the magazines.

The whole heating and air-conditioning plant was designed by Dr. Oscar Faber, O.B.E., in collaboration with the L.M.S. Hotel Controller's department.

All large-scale technical experiments in building are of importance to architects. It will be interesting to observe what influence the new Queen's Hotel at Leeds has on future hotel building in this country.



## Correspondence

### OFFICIAL ARCHITECTURE AND PRIVATE ARCHITECTS

*City Architect's Office,  
Town Hall, Manchester, 2  
9.11.37*

*To the Editor, JOURNAL R.I.B.A.*

DEAR SIR,—I hesitate to direct my first letter to the Press on a controversial subject, but I am roused to do so after reading the reference to official architecture and private architects in the inaugural address delivered before the Royal Institute of British Architects by the President. A large part of the address is a challenge to the official architect, and it is the President of the Institute who has thrown down the glove.

The attack which has been made is calculable of undermining the status of a very large proportion of the members of the Institute of which he holds the most honoured office.

The criticism of "inappropriateness" was directed to those buildings which are in the main designed by official architects; this could give no other impression than that this was a fault confined to official architecture. I submit that this is by no means correct, and that the statement is unfairly misleading.

"Slot machine" architecture, where it exists, can not be said to be confined to official architects' departments. This criticism was equally unfair and misleading. It is frequently an easy matter to identify the architect of any building of note, and this applies particularly to eminent private architects. I feel they would be distressed if this inferred staleness. I do not agree that the work of official architects is increasing because it is found to be as easy as catering "by means of slot machines," but because it is proving to be more economical and satisfactory; satisfaction resulting from the constant contact between architects and clients. The official architect lives with his client, and, what is equally important, has to live with his jobs after they are completed.

Referring to the designing of public buildings, it is inferred that these are in the hands of official architects. The truth is that the plums—the principal public buildings—are the subjects of competitions, and are designed by private architects, and never before has there been such a harvest as the last few years have produced.

It is so easy to attack the official architect; it appears to be a new form of etiquette, but it is an ostrich-like attitude. Is it not equally important that the stores, commercial houses and banks, &c., the preserve of private architects, which are the principal contribution to the architecture of the towns, should be designed by "the best men for the purpose in the whole profession?" If posterity has a finger to point most of it will cover the architecture of private practitioners.

Reference was made to the employment of supernumeraries by official architects' departments to meet an emergency. Is it not a better practice than working existing staffs overtime—not uncommon in private architects' offices? Do not private architects sometimes employ temporary staffs to meet an emergency, and dismiss them when work is normal?

Perhaps the Minister to whom the deputation was sent by the Institute found there was nothing in their case.

I do not like the idea of a separate organisation for official architects, but if this is to be the attitude of the R.I.B.A. it will be necessary for official architects to do something about it, and it will be an unfortunate day for the Institute.

I have expressed the views of sixteen members of the Institute on the permanent staff of my department.\*

Yours faithfully,

G. NOEL HILL,  
City Architect. [F.]

\*Members are reminded that the President stated definitely several times during his speech that the opinions he was expressing were not necessarily those of the Royal Institute. EDITOR.

### STANDARDS OF ADEQUACY AS TO THE ACCESS OF NATURAL LIGHT TO HABITABLE BUILDINGS

*3 Gray's Inn Square,  
London, W.C.1*

*2.11.37*

*To the Editor, JOURNAL R.I.B.A.*

SIR,—As in the prefatory note by the Science Standing Committee on the "Standards of Adequacy as to the Access of Natural Light to Habitable Buildings" members of the R.I.B.A. are invited to submit their comments on the proposals. I venture to put forward a number of considerations, some of which have utilitarian objects and others æsthetic ones. These latter, in my opinion, cannot properly be ignored if

hygienic standards are not to conflict with those appertaining to civic design.

In order to emphasise the arguments in the most convenient manner, the following paragraphs are preceded by a statement of the conclusions to which they lead.

1. Whereas in the Memorandum it is laid down that in streets of all orientation the minimum ratio of width of street to height of buildings be that of 1 to 1, it is here suggested that in the case of streets running east to west this ratio should be 4 to 3. While agreeing with the statement that owing to the prevalence of cloud in the English sky it is generally more reasonable to plan for "skylight" rather than sunlight, there are certain facts



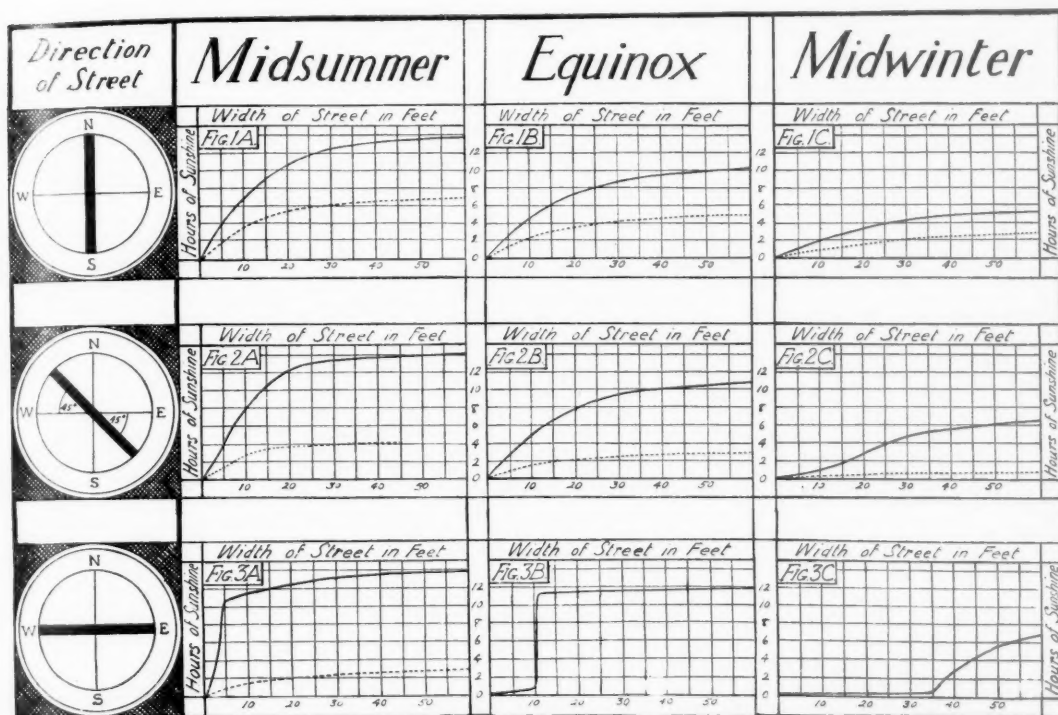


Fig. 1

concerning the incidence of the latter which are too important to be ignored. In order to make this point clear I venture to reproduce here some diagrams which first appeared in the *Town Planning Review*. (See Fig. 1.)

The graphs are based upon the positions of the sun in latitude 51°. It is assumed that each street is of uniform width and continues indefinitely. The breadth of the street is taken to be the distance between the buildings as measured from front to front and from back to back, the distance in each case being the same. The street is here described as being in sunshine when the whole of the wall surface of one side of the street is in sunshine. Hence, the total amount of sunshine in the street is equal to the sum of the hours of sunshine on the front and back of each house.

In the construction of these graphs it has also been assumed that the buildings on either side of the street have flat roofs and are of a uniform height of 9 ft. Calculations concerning the amount of sunshine in streets of taller buildings can easily be performed, because the amount of sunshine is not dependent upon the actual height of the façade but upon the ratio of that height to the width of the street.

Example of use of graph: In a street where the proportion of width of street to height of building on either side of the street is 4 to 3, how much sunlight would be obtained at midsummer in a street of orientation north to south? Answer: In the graph it is assumed that the standard unit of building height is 9 ft. and therefore the width of the street with which we are here concerned

is 12 ft. If the points of the graph lines immediately above the 12-ft. point in the horizontal ordinate of Fig. 1A are read in relationship with the record of hours of sunlight shown on the vertical ordinate, we find that there would be a total of 8 hours of sunlight equally divided between the fronts and backs of the houses.

The most remarkable result shown by the graphs is that at the period of the equinox in the case of a road running east to west where the proportion of height to buildings is 4 to 3: almost the maximum sunlight is obtained and there is practically no advantage in broadening the street beyond this point. A possible 11 hours sunlight a day on a façade with south aspect would here be obtained and sunlight on the façade with a north aspect is scarcely worth planning for as the graph shows that even at midsummer it would amount to only three-quarters of an hour. It is, of course, assumed that where possible the living rooms of the houses are planned to face south. In view of the information given in diagram 3B it would be manifestly undesirable not to make the street sufficiently broad to take in the amount of sunlight indicated at the point where the graph suddenly leaps up from 1 hour to 11 hours sunshine.

2. While accepting the conclusion in the Memorandum that in Zone B an equality of the relation of width of street to height of buildings gives a tolerable minimum of skylight in the rooms, we

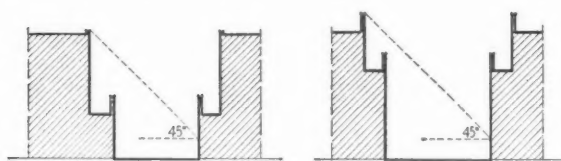


Fig. 2

could, it is here suggested, make a small concession to æsthetic standards by decreeing that the squareness of the street section be mitigated. The square section produces the charm neither of the narrow-proportioned street, using this term to mean one in which the width is less than the height of the buildings on either side, nor that of the street of broad proportion, that is to say, where the width noticeably exceeds the height of the buildings and is uncomfortably poised between the two. If the width of the street and the height of the buildings are exactly equal, a most necessary inflection is absent. But a section of the street should indicate clearly that in a sense it *knows* which is its side and which is its base. When this inflection has been expressed the street is endowed with a certain sensitiveness, an elementary degree of vitality which necessarily gives pleasure to the beholder. It would be most unfortunate, therefore, if a building regulation should stereotype a form of street architecture which is definitely displeasing. The necessary modification might be achieved by measuring the 45-deg. angle of light from the sills of the ground-floor windows, that is to say, at a standard height of 4 ft. from the ground, rather than from ground level itself. By this means there would always be 4 ft. difference between the width of road and the height of the buildings, and if these latter are not more than four storeys high this difference would be readily discernible and would suffice to produce a recognisable inflection of the above-mentioned kind. Needless to say, the elegance of the street section is still further enhanced if there is a recess on one or other of the storeys, as in Fig. 2. It is here assumed that the street width for the purpose of measuring sunlight on the ground-floor storey is the distance between the wall of that storey and the wall at the highest point of the building opposite.

3. Whereas the Memorandum lays down that in Zone A the minimum proportion of width of street to height of buildings be 4 to 5, it is here suggested that this minimum shall in certain cases be reduced. This is presumably the central or business zone of a town, where it is assumed that for the most part the occupants of the buildings use them for business purposes only and not as habitations for their families. According to the Memorandum the minimum proportion of width of street to height of buildings is that of 80 to 100. This appears to be a reasonable concession as far as it goes, but it scarcely goes far enough if it implies that in a new town or when parts of an old town are re-built there must never again be tolerated the narrow street lanes between main roads, thousands of which can be found in London and in the older parts of other cities. Many of these lanes are paved and are extraordinarily useful to pedestrians, and, incidentally, provide convenient shopping quarters. Some of the pleasantest of these have a proportion of width of street to height of buildings as low as 1 to 4, and it is by no means established that these rooms are less healthy to work in than those in the mammoth blocks abutting on wide streets, where so frequently we find that behind the

offices lit from the outside walls there are other offices between partitions which require not only to be artificially lit but artificially ventilated as well. It seems desirable in the interests of civic design and for the convenience of the inhabitants of our towns to resist the present tendency to squeeze out all the narrow streets, which not only form an expressive contrast to the main thoroughfares but themselves perform a useful purpose.

4. Other considerations besides that of adequate lighting should determine the maximum permissible height of building in any particular street. In the section of the Memorandum dealing with Zone A (see R.I.B.A. JOURNAL, page 1055, 16 Oct. 1937, there appears to be implied the unquestioned acceptance of a regulation that ordinary commercial buildings in this area should be as much as 100 ft. high. The permission to build commercial structures of such height is gravely prejudicial to the appearance of our cities and to their social expressiveness. With reference to this point it may be mentioned that the L.C.C., as a result of repeated representations, has agreed to propose a limit to the height of buildings surrounding St. Paul's Cathedral. But this belated concession seems based on the assumption that we have only one public building in the Metropolis deserving of this kind of protection. If public buildings are not to be completely dwarfed by private and commercial ones, these latter should certainly not be allowed to exceed a maximum of 70 ft., which, I believe, is that adopted in the City of Paris. Therefore, a limit of 60 ft. would be a still further safeguard for the important principle of civic design that buildings of special social consequence should be allowed a formal prominence not only in the plan of a town but in its silhouette. For this reason any assumption that the height of buildings should be entirely determined by angles of light in relation to width of road should be stoutly resisted.

5. The insistence of a uniform ratio of width of street to height of buildings of 2 to 1 in Zone C would lead to the kind of monotony of layout which is so common in housing estates in "open development," where there is already an insistence upon a standard minimum distance of 70 ft. between the fronts and backs of houses. It is here suggested, therefore, that the sunlight regulations for Zone C should be identical with those for Zone B and that if it is desirable to prescribe a low general density of buildings in Zone C, this can best be attained by a regulation insisting upon a certain average amount of private or public garden space. In Zone C, which appears to be a suburban zone, the Memorandum suggests that a more generous amount of skylight should be allowed in all circumstances. Here the minimum ratio of width of street to height of building is fixed at 2 to 1. This regulation is open to the following objection. It appears to introduce a legislative bludgeon by the use of which town planners are almost compelled to surround all towns with zones of standardised suburbia. But in the opinion of many this is a malpractice which should by no means be encouraged, because there is much to be said for an immediate contrast between town and country. But even if we assume that a generous provision of private and public gardens in association with houses in a residential area is desirable, in many instances this object can be more pleasantly achieved if we vary the width of the streets occasionally, having comparatively narrow streets with long gardens behind the houses and, alternately, rows of houses which abut on public squares but the backs of which are comparatively close to the backs of the houses in the road behind them.

A. TRYSTAN EDWARDS [F.]

A.G.R.C.

15 Kingsend,  
Ruislip,  
Middlesex

To the Editor, JOURNAL R.I.B.A.

SIR,—The Architectural Graphic Records Committee having included in their Central Card Index the architectural drawings and prints in over 40 metropolitan libraries (including the Record Office, the Crown Lands Office and the Guildhall), are anxious to extend their activities to provincial libraries and public collections. I shall be glad to hear from any members of the Allied Societies who can assist in this interesting work. Photographs and book illustrations are not dealt with, but any other illustrations of buildings of architectural interest erected in England or Wales before the year 1830.

The Index now occupies over twenty drawers in the Library of the Institute and is daily proving its value.

Yours, etc.,

F. H. MANSFORD [F.],  
Hon. Sec. A.G.R.C.

#### THE PRESERVATION OF STONE BUILDINGS IN LONDON AND THE RESTORATION OF THE FAÇADE OF SIR JOHN SOANE'S MUSEUM

Sir John Soane's Museum,  
13 Lincoln's Inn Fields,  
W.C.2  
8.10.37

To the Editor, JOURNAL R.I.B.A.

SIR,—The preservation of stone buildings in London is a matter of national importance. Looking back over the many experiments of the past half century it seems improbable that any better material than Portland stone is likely to be found. It is therefore worth while to point out that there is an ancient tradition of the use of oil and paint for stone in highly exposed situations that can be carried back to the practice of Sir Christopher Wren in building St. Paul's.

The building accounts of the Cathedral, now being published by the Wren Society, will show in next year's volume that he painted the pediment bas-reliefs on the north, west and south sides after they had been soaked in oil, and the same method was followed with the external statues.

Oct.-Dec. 1693. To Wm. Thompson, Painter.

for Painting Ye King's Arms in ye North Pediment 4 times over, 18 yards at 16d. per yard, £1 4s. od.

Oct.-Dec. 1699. for Painting ye Carved Phoenix in ye Pediment over ye South Portico, 5 times over in oyle, 25 yds. at 16d., £1 13s. 4d.

Dec. 1706. for Painting ye Pediment at ye West End, 145½ yds. at 12d. per yd., £7 5s. 6d.

June-Dec. 1721. Painting ye 7 Figures at ye West End. 4 times in oyl at £2 ea., £14 os. od.

In addition to this, as a precaution against the damp atmosphere, the whole of the inside walls of the west portico were painted. Portland stone will absorb the oil and paint, and

no one would believe that the sculptures were painted from their present appearance, but it is certain that their preservation is due to Wren's precaution.

The façade of Sir John Soane's Museum was painted in 1839 after Sir John Soane's death by order of the trustees, who had at the time no architect member. It has been regarded as a stucco façade in consequence, but it was not the practice of Sir John Soane to use stucco. He adhered to the brick tradition of the 18th century, when he could not afford stone. The whole of the stonework of his house is a very fine Portland with some features in Coad stone, which was an early form of terra cotta. Various attempts to remove the twenty coats of paint gave no satisfactory results, until the process of grinding off the paint with carborundum wheels, driven by small electric motors, was tried, and has proved highly successful. The paint flies off in a cloud of fine dust, and the stone is not affected. It is very hard, no doubt it has benefited by the absorption of the oil and paint. It is believed that a century and a half ago it was the practice to oil Bath stone, and that the durability of Apsley House, faced in that material about 1820, is due to that cause. When the Hanover Chapel in Regent Street, the work of Cockerell at that period, was demolished, the stone was in very good condition, and it is thought from the same cause.

It is a fact not generally known that Sir Christopher Wren oiled and painted the whole interior of St. Paul's, 1709-10. When the paint was removed in 1872 it was no doubt thought to be of a much later period. The fact is unquestionable, and full particulars will be given in the next volume of the Wren Society. It is highly important in its bearing upon the question of Sir Christopher Wren's actual intentions in the decoration of the Cathedral. The two statues on the façade of Sir John Soane's Museum are being left painted. They are signed "Coad and Sealy, London, 1812." The works were at Lambeth and many specimens of their work remain in excellent condition, but underburnt examples will be found decayed, as in the case of two or three Acroters at the Museum, which have been replaced in Portland stone, oiled and painted.

ARTHUR T. BOLTON, F.S.A. [F.],  
Curator

#### SURGEON PAINTERS

19 Bedford Square,  
W.C.1

13.11.37

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—I should like to draw the attention of members to a very pleasant exhibition of works of art by Fellows and Members of the Royal College of Surgeons of England, which is open at the College until 27 November.

The exhibition shows a great variety in points of view and in many cases the technical handling reaches a high standard. As might be expected, landscape is in the majority, including some good studies of architectural subjects. Those by Harold Hodgson and R. Foster Moore are notable. The works of Henry Tonks (lent by the Imperial War Museum) are outstanding, and T. H. Somervell's studies, of Mount Everest and in Thibet, have a marked solidity in treatment.

Yours faithfully,  
H. V. LANCHESTER [F.]

## Book Reviews

### TALKING SHOP\*

By J. SPEDAN STEDMAN [A.]

"A nation of shop-keepers." This statement must still hold good when it is realised that necessity shops, i.e., butchers, bakers, clothiers, etc., exist for every 300 families in England. Numerically, this class of building is, therefore, second only to housing, and as such deserves much more consideration by architects than it appears to have had in the past.

Since the advent of large stores in this country we have been inclined to look to America for a lead in design for retail selling, and this attitude has been reflected in the Press, for during the last seven years the *Architectural Record* has given more space to the planning of retail shops than any other periodical. Shop fronts, however, have been extensively considered here, both in articles and books, individually and as part of the street façade, but the consideration of the front as an integral part of the interior planning, based on the client's requirements and the class of goods sold, seems to have been ignored. This temper is admirably expressed in a leading article in *The Architects' Journal* ten years ago:—

"There are few enough opportunities in modern building conditions for indulgence in a certain exuberance and gaiety in lightheartedness and fantasy in pure design. . . ."

"These opportunities exist in exhibition buildings, and, to some extent, in seaside pavilions and bandstands, but they exist in the greatest number in shop-fronts. . . ."

How much modern thought has eaten into this old fallacy can be seen in all its clearness in the series of articles recently published in this same journal, and now issued in book form. The articles have been revised and amplified, and further photographs and drawings have been added to better explain and balance the work.

The additional illustrations of a furnishing showroom in Wigmore Street are worthy of note, and there are more interiors of shoe shops at Ealing and Ilford. The former includes an excellent sheet of working drawings of a naturally and artificially lighted show window and internal indirect lighting units, and the latter has some clear details of fittings.

Many minor alterations indicate the care bestowed upon the work: for example, the substitution of an excellent photo of a "reflectoplan" blind for a less fortunate earlier illustration, and the re-grouping of the

sections on windows, blinds, signs, pavement lights, etc.

The original claim, that this work sets out to "study aims and principles underlying clients' requirements, and technical methods and materials available for their fulfilment," is amply justified.

Within the scope of 120 pages there are no fewer than 160 plans, working drawings and sketches, and an outstanding collection of 141 photographs, many of which are by the authors themselves, of selected European and English examples of shop design, illustrating a brief but comprehensive and critical survey of the whole subject.

The authors study the likely reaction of different classes of customer to design, and divide shops roughly into necessity and luxury groups.

The best shopping position and choice of district are then deduced, and the scientific use of "potential customer maps," based on a close study of the occupations and social standing of the residents, is indicated. The effect of similar shops in the vicinity, the accessibility of the site, its relation to street layout, and the effect of traffic regulations are all considered. A comparison is made of the turnover value of corner sites, sloping sites, sites on curves, and relative positions of entrances, etc.

The design and local regulations controlling windows, blinds, hanging signs and pavement lights are profusely illustrated, and grouped with a section on exterior surfaces forms a most useful guide for the rational choice of elements to produce the shop as seen from the street.

Ten theoretical plans indicate general requirements in layout and equipment for a chemist and optician, also various foods and clothing shops.

Photographs are relied on for electric, gas, motor, and sanitary showrooms, and the equipment of bookshops, confectioners, furniture showrooms, milkbars, silversmiths and tobacconists. Eating shops, hair-dressing saloons, hardware shops, sports shops, and stationers are comparatively neglected, however.

Internal floor and wall coverings are fittingly dealt with, and although costs have been tabulated in various parts of the book a separate chapter has been set aside to give a more general basis for calculations, and a full bibliography is included.

I marvel at the conciseness of the work and hope that a general appreciation of the problems set forth may lead to a more detailed study of retail traders' requirements by the profession as a whole.

\**Smaller Retail Shops*. By Bryan and Norman Westwood. 410. 120 pp. London: Architectural Press, 1937. 10s. 6d.



## THE MODERN HOUSE IN ENGLAND

THE MODERN HOUSE IN ENGLAND. By F. R. S. Yorke A.R.C.S.  
4th. 144 pp. 1937. London: Arch. Press. 17s.

When Mr. F. R. S. Yorke wrote his book on the modern house in 1934 only a few not very distinguished examples could be found in England worth including. Now he has been able to fill a whole volume with modern English houses, all of which are interesting enough to deserve study and many of which can be said to make a positive contribution to the development of architecture. There are forty-nine houses by over forty architects, some in partnership. The houses are divided into a construction classification; twenty-one brick, seven frame with various facings, and twenty-one concrete. Actually, almost all the "brick" houses have some reinforced concrete in them, and almost all the "concrete" houses some brick; the classification having been governed by the material of the main supporting walls only.

Is it a change in the character of modern architecture that so many brick houses can now be found which can rightly be included in the modern group? When Mr. Yorke's *Modern House* was published he seemed to look down his nose at anything in brick; at that time brick was not considered good even for the infilling wall in a frame structure; it was quite *d'modé* as a structural material, since its essential qualities could not be made to conform to Mr. Yorke's dictum that "the function of the wall has changed, it is a thin skin, hung on a framework instead of on a foundation. . . . The wall surface is regarded aesthetically as a continuous plane: as a skin enveloping and expressing the surface of a volume." Whether the fact that the biographer of contemporary modern building is forced to include brick built houses is to be regarded as backsliding by modern architects generally who have failed to live up to the canons propounded or as a widening of the biographer's conception of what is modern architecture does not matter very much, the fact itself is of considerable importance as showing what dozens of commentators have tried to point out already, that the essential quality of modern work is not tied to any one form of material. Five years ago timber was hardly noticed by modernists; to-day timber building is showing itself to be as thoroughly capable of expressing the ideas that are fundamental to modern living as any other material. Houses such as those designed by Miss Mary Crowley at Tewin conform to no established canons, the walls are not "enveloping skins," the roofs are not flat, the windows are not continuous, even if they are larger than usual, and the dining-room is not planned to allow eating "under cover but in the open air," but those houses certainly deserve their place in a book of modern houses, and so do Tecton's Haywards Heath houses, which are hardly more orthodox. The fact is, as Mr. Yorke says in his preface, the essence is the plan. Mr. Yorke, however, tries to detach modern architecture from its logical and coherent relationship with all good architecture by particularising and saying that the essence of modern architecture is the plan. The essence of any historical style is the plan. Victorian plans were as closely related to the needs and economics of that time as modern plans are to our needs and economics, and since Victorian needs and economics were Victorian so are the houses, whatever styles may have been imposed on them by goths and classics.

Although brick is suitable there is no doubt that *aesthetically* it is as it were on the defensive. Concrete is still the blue-eyed boy to steal the limelight, and no wonder! The new Wentworth house by Connell, Ward & Lucas, McGrath's house in Surrey, Chermayeff & Mendelsohn's Chalfont St. Giles house, Fry in Froggnal Way, and on a simpler scale the Samuel & Harding house at Bronley, the Lubetkin Whip-snade houses and several others have a gleaming, vigorous positiveness about them. They are the *prima donna* of modern building that bring flowers to the stage door, even if the more normal, quiet, efficient, honest brickbuilt houses do most of the hard work of the modernity campaign.

As part of his preface Mr. Yorke effectively trounces the obstructionists who seem always ready to condemn modern houses as "injurious to amenities." This preface is useful, but the pictures in the book show up these Mrs. Partingtons even more effectively than the editor's quietly cynical phrases. Where in all architecture could be found buildings more suitable to their environment than the Wentworth or Moor Park houses by Connell, Ward & Lucas, or the Whip-snade houses by Lubetkin? These are chosen merely as examples, but the book is full of others as good to show the endless range of expressions to meet every need and mood of client and countryside that modern architecture, despite all its universality and all its mechanistic qualities has to offer.

## CURRENT PRACTICE IN THE DESIGN OF DOORS AND WINDOWS

ARCHITECTONISCHE DETAILS. I. RAMEN EN DEUREN (WINDOWS AND DOORS). By Prof. Ir. J. G. Wattjes. 4to. 78 pp. Amsterdam: N.V. Uitgevers-Maatschappij "Kosmos." 1937. 6fl. 90.

This is a book of details of current practice in the design of doors and windows collected from work in twelve European countries and the U.S.A., with an introduction in English, French, German and Dutch by Professor Wattjes, whose many books on modern architecture are well known to English readers. "It would be useless," the editor suggests, "and waste of time if every architect were to design these details anew and in his own way for every building". . . so that "this book aims to put at their disposal a big variety of good architectural details." The examples have been chosen not for their eccentricity or developed individuality but as "simple and plain forms." Each building is illustrated by a general photograph, useful as showing the setting of the windows and doors described by detail drawings; in some instances general plans of the whole building and always detail plans of the openings are given with large-scale detail sections. The drawings are clear in most cases, though one or two examples are shown without large sections and the small sections are too small to be really useful. The drawings are mostly unannotated but materials are differentiated by hatching and metric scales are given.

In general, the examples progress from purely traditional to definitely modern practice in metal and wood and are from buildings of all types, large and small, rural and urban, and in climates as widely differing as those of the Austrian Alps and Braintree.



## WOOD

THE VILLAGE CARPENTER. By Walter Rose. Introduction by Frank Kendon. Cambridge University Press. Price 8s. 6d.  
WOODCRAFT IN DESIGN AND PRACTICE. By Rodney Hooper. London: B. T. Batsford, Ltd. Price 12s. 6d.

The first is the story of the woodworkers of yesterday. It forms a record that is badly needed and is the more important in that its author is of the craft, trained in it and following an old family tradition.

The second deals with modern designs and methods in producing domestic furniture, most clearly and admirably set forth: though its pages do not embrace carpentry and joinery as its title might lead one to suppose.

Mr. Rose is to be congratulated on a remarkable achievement; coming now, when great changes have banished nearly all traditional English handwork to oblivion, it is the more remarkable. Written as it is by one schooled in the sound old methods and ripe with years of wide experience, it forms a rare and valuable record that must give a feeling of sheer delight to all who read the book. Owing to its simple unaffected style, one does not at first realise that the chapters contain much solid fact and information. There is no hint of the text book, but rather the feeling that one is reading a very human document.

Mr. Rose first describes his earliest recollections, the business founded by his grandfather and continued by his father: the amazing feats of strength and endurance of those old days, e.g., walking to work 17 miles in the early hours, doing a day's carpentry and back again at night, carrying a bag of tools. Then follow chapters on timber, the carpenter's shop and the tools then in use. All this is of absorbing interest and there is much to read carefully and ponder over. Mr. Rose holds no brief for artificially seasoned timber; he gives his reasons and one is left with the unpleasant conviction that the modern craze for speed is being bought far too dearly. "In my father's day it was held that one year's seasoning should be allowed for each inch-thickness of the plank, a safe rule which still holds good." Those were days of hard labour, of rough and often dangerous work, but what quality those craftsmen gave both in material and workmanship.

The chapters dealing with work on the farms, the mills and the water pumps (then entirely of wood) breathe the very essence of the sweet country air. Much of the work there done is nothing short of a great adventure, and one marvels that it was done at all by simple country folk. But then: think of the oak Lantern of Ely Cathedral and of other miracles in wood.

"No story of the village carpenter would be complete without its chapter on Undertaking." So begins Chapter XII. It is an excellent piece of writing, most touching in its very human appeal. To the writer it seems to catch the spirit of country people and the very strong Victorian conservatism.

In Chapter XIII the author deals with such furniture repairs as come the way of country carpenters. He very wisely advocates a study of the subject before undertaking such work. The author is a little wide of the facts in some of his historical references. For instance, the walnut period should include "the later years of the Charles régime with William and Mary and Queen Anne" (and also George I for that matter). Again, history is not "silent" regarding the names of cabinet makers working in walnut. Thanks

mainly to the researches of Mr. Robert Symonds, the names of several such men are known and some of their work definitely identified.

Though these are important points to students of English furniture, they are relatively trifling in a work of such strength and character.

Every architect must surely read this book. It has much to teach that we have never learnt or have forgotten in the rush of modern business.

The pages are illustrated with a number of good photographs and diagrams: there is also an adequate index-glossary.

Mr. Rodney Hooper has almost crammed a quart into a pint pot, but that is not to say he has done that with any confusion. On the contrary, he has combined detailed knowledge with system and consequently the book can be consulted like a well-drawn set of plans.

The book is designed to show a great variety of treatments for the design and construction of furniture suitable for to-day's needs, in which, as far as possible, the author has avoided work involving very advanced or intricate technique.

A severely technical character proper to a text book on cabinet making is not the author's aim. His space being limited, he has given just sufficient of the main points of construction of the various types. This technical information is given in isometric views arranged in close relationship to clearly drawn plans, elevations and sections. Every drawing is to scale, with the scale drawn on the margin line. In addition to traditional mortice and tenon and dovetails construction in solid wood, the uses of ply and laminboard are well exemplified. There are also a large number of excellent photographs of modern pieces by well-known firms and individual designers and some perspective interiors by the author, which are not altogether quite happy.

Following three introductory chapters on the purpose and use of furniture, the bulk of the book is occupied by the author's drawings. There are sixteen sections devoted to articles of furniture for living rooms and dining rooms, five illustrating bedroom pieces, followed by garden furniture and a chapter on simple woodwork for schools.

Each page of diagrams is given a figure number, but these numbers, unfortunately, repeat with each section, which, in places, the writer found rather confusing. It would have been better to number the figures consecutively throughout, irrespective of the number of plates devoted to each section.

Except in the case of garden furniture, nothing is said about surface finishes, nor is the reader told what kind of polish was given to the examples shown by photograph. The amateur, at least, could well do with some guidance in this direction. Left to himself, the odds are he will end up with a jammy finish in french polish, where he might have achieved a good result, and more tastefully, by lightly waxing the wood.

It would take too long to scrutinise every detail of construction that the author has so clearly drawn, but exception may be taken to the method shown in Fig. 6—Adjustable garden arm-chairs—where in items 5 and 6 an arm is united to a leg in a quadrant curve. The separate dowelled quadrant piece is weak. It would be better to use a little more wood and form one joint between arm and leg members on the 45° mitre.

This book should be found most useful in many directions.  
J. C. R.

## TIMBER

TIMBER HOUSES. Edited by E. H. B. Boulton. 4to. 96 pp. London: Country Life. 1937. 7s. 6d.

TIMBER AS ALTERNATIVE TO STEEL: ITS STRUCTURAL USES TO-DAY. A review and a plea. 8vo. 52 pp. London: Nicholson & Watson. 1937. 1s.

Three or four years ago the use of timber as a contemporary building material in Great Britain received practically no consideration. There was little recent building to show that timber was more than an interesting and charming material that had been used in the past for whole houses but now survived merely as an incidental structural material for floors, roofs and joinery. Now, very largely under the well-controlled influence of the Timber Development Association, there is a revived and, making some allowance for the excitements of revivalism, an intelligent interest being paid to all its uses and a useful literature growing up. The book and the pamphlet under review are both polemical in that their concern is to present the uses of timber in the most favourable possible terms, but they are none the less useful if their limitations are recognised. Mr. Boulton's *Timber Houses*, as a picture book of houses, is the kind of work which will always attract attention simply because it gathers a wide range of pictures of a special type of building into a neatly composed book in a way that is definitely useful to architects who always are on the look-out for practical exemplars.

The pamphlet is an obvious result of the ill wind which has blown all steel into the armaments factories—leaving the field clear for the timber producers to press the merits of wood as an engineering material. It, and Mr. Boulton's book, are concerned to put across the merits of timber by presenting all the advantages of cost, efficiency (including durability and fire risks) and æsthetic qualities that can fairly be claimed.

On the question of cost the pamphlet claims that temporary timber schools can be built at a cost of from £8 to £10 per place and that a "more permanent" type of school has recently been built by the Lanarkshire County Council for 500 primary and post-primary pupils at a cost of £20 per place. In his recent paper on the evening of the opening of the R.I.B.A. schools exhibition, Mr. Burchett stated that the approximate normal cost of schools built in brick and concrete was about £60,\* but he gave a clear warning that it was impossible to balance accurately the "per-place" cost of one school against another. More striking, perhaps, are the cube (structure only) costs of Hendon Corporation Schools in timber of 7d. to 8d., as against 1s. to 1s. 4d. in other forms of construction.

The durability of timber houses hardly needs elaboration: the existence of old houses in England and throughout Northern Europe and America is evidence that if they are well built and properly maintained timber houses can have a life at least as long as any building owner is likely to demand. The fairly recently developed use of red cedar has removed one maintenance charge, since red cedar houses require no painting. Fire risks are not as great as is sometimes believed and the authors both state that a 2s. 6d. per cent. premium is the standard that can be expected, which makes the charge about 10s. more a year on a timber-built £1,000 house than on a similar brick house.

\* See R.I.B.A. JOURNAL, 8 November 1937.

The introduction to *Timber Houses* is full of useful snippets of technical information; these and the many photographs and plans make the book a useful one for architects, though no attempt has been made to make it a technical handbook. For technical information architects must go to the many excellent publications of the Forest Products Research Laboratory. The pictures are of about eighty erected buildings or designs by twenty-six architects in every possible style, varying from reproductions of traditional forms which have some contemporary validity to adventurous modern work which demonstrates the success with which timber can settle into the range of the modern movement in planning and design. It is interesting to observe that, whereas in so many technical fields there is a tendency to elaborate form and to use increasingly intricate elements, in architecture the most progressive schools welcome any helps towards simplification of plan and structure. Timber would seem to meet the demands of the modern architectural æsthetic half way. It provides a natural material of universal distribution; it gives slender supports and wide spans in a frame structure which allows the maximum of flexibility with economy.

## MIDDLESEX

AN INVENTORY OF THE HISTORICAL MONUMENTS IN MIDDLESEX. By the Royal Commission on Historical Monuments (England). xxvi + 176 pp. + 184 plates. 4to. London: H.M. Stationery Office. 1937. 25s.

The Royal Commissioners, charged with the duty of preparing an Inventory of the Historical Monuments of Middlesex, have interpreted their charge generously in so far as the words "Inventory" and "Monument" are concerned. We cannot blame them for the essential defects which result from the limitation of the term "Historical" to work erected before 1714. Parliament, doubtless feeling that a line must be drawn somewhere for reasons of time and money, drew it at that inauspicious year which coincided with the death of Queen Anne. The Queen would feel flattered could she have foreseen that her demise would be regarded as a boundary between what is worth recording and what is not. Seeing that the Commission was appointed in 1908 and that they have only completed work on the capital and seven counties, it may be thought that completion may be achieved about the year 2000. But there are forces at work which will restrict the scope of their endeavours; the forces exercised by estate developers, medical officers of health and motorists generally, assisted by the Chancellor of the Exchequer and several bishops.

There are very few Roman remains in Middlesex; and outside the administrative county of London there have never been any important ecclesiastical buildings, although just over the borders were the abbey of Barking, Waltham and St. Albans. Nor are the early buildings of Harrow School comparable to those at Eton and Winchester. There are no mansions belonging to the period under consideration to be put beside Hatfield or Audley End. But the Commissioners had one trump card of the highest rank and they have played it magnificently: Hampton Court Palace is illustrated by several plans and over a hundred excellent photographs, and described in nearly 40 columns of compact authenticated statements. Besides more general views there are photographs of lead vases, iron gates and firebacks, brass door furniture

and overmantels. The ceilings portrayed can be studied as they can rarely be in the palace and one feels that it would be worth while to lie awake to gaze at such artistry. It may be noted that the Queen's Closet contains a contemporary marble fixed lavatory basin, but the single tap suggests that there was not "h. & c." The name "Chocolate Court" attached to a lighting area next the Queen's suite is a reminder of Queen Anne's attachment to that beverage. It is interesting to note that the terra cotta busts over the George II Gateway came from Windsor, where they had been deposited after the destruction of the Holbein Gate in Whitehall, which they originally adorned. These busts, as well as those over the Anne Boleyn Gate, are the work of Maiano.

Perhaps the most unusual building illustrated is the isolated brick tower at Bruce Castle, Tottenham. At first glance it looks like a local surveyor's attempt to make a water tower look "architectural." It is nearly twenty-two feet in diameter with panelled sides, false machicolations and a (modern) embattled parapet. Originally there were no windows, but there was a wooden turret in the centre of the roof. The date is given as sixteenth century and the purpose uncertain: the walls are three feet thick and the lower chamber is thought to have been domed.

Another surprise is the tower of East Hillingdon Church. The date appears to be established at 1629. All its features except the wooden bell turret suggest an earlier date.

Notable examples of carpentry are the great barn at Harmondsworth and the oak staircases at Cromwell House, Highgate, Boston House and at Swakeleys. The richly carved mediæval stalls at Littleton and the Flemish communion rails there and at Harefield are noteworthy. The finest funeral monuments are those to Sir John Wolstenholme at Great Stanmore, Sir Roger Ashton at Cranford, the Countess of Derby at Harefield, Sir Thomas Chaloner at Chiswick and the Kinge monument at Finchley. The recumbent figure of Lady Berkeley at Cranford is thought to have been sculptured in Rome. Most of the finest of such memorials in Middlesex were executed after 1714.

The oldest wallpaintings are at East Bedfont (c. 1300) and, for domestic examples, at Knightsland Farm, South Mimms. Since the Inventory was compiled a painting of "The Seven Deadly Sins" has been uncovered at Ruislip church. Also the oak font in Ickenham church, which had been discarded in favour of one of Gothic (Victorian) type, has been replaced. There are only about ten wood fountains known in England, all of post-Reformation date.

The index is most complete. For instance, such entries as Brasses, Fireplaces, Roofs, etc., are classified by type and date as well as being entered topographically. There is a map in the cover, but the scale is barely large enough to enable the position of many of the monuments (referred to by numbers) to be clearly discovered. In future volumes it would be worth while to give lists of books referred to, as was done by Mr. Martin Shaw Briggs in his volume on Middlesex.

The quality of the illustrations and the format generally are most admirable and at the low price could not be bettered. It is inevitable that in a first edition of an encyclopedic work there should be some errors and omissions. Lord Crawford, in his preface, asks the co-operation of readers in rectifying these because the work of the Commissioners include the keeping of a Record Card Index at 29 Abingdon Street which is open to students to consult.

F. HERBERT MANSFORD [F.]

## LETTERING

LETTERING OF TO-DAY. *Autumn Number of "The Studio"*  
4to. 144 pp. London: Studio. 1937. 7s. 6d. scrapper,  
10s. 6d. cloth.

Although writing, lettering and typography, three sides of one art, are the most universal, unavoidable arts in civilised society, there are few books which give in good perspective a general view of contemporary practice. This *Studio* book is, therefore, welcome because it does cover the whole field, omitting typography, reasonably well. The illustrations for the most part are wisely chosen and the articles in general are scholarly and helpful to the observer who wishes to understand what is happening and why.

The architectural section is by far the weakest. This is unfortunate not only because the general high quality of the book is impaired but because this side of the subject more than all the rest really wants critical treatment and the stimulus which a book of the right sort can give to make able young practitioners take the matter seriously. The article which goes with the illustrations of architectural lettering is platitudeous and full of irritating moralisings. Each section starts with a statement such as "letters must group happily together" or "lettering which does not achieve its main purpose is clearly a failure and therefore bad . . ." The good intention which oozes from every paragraph is made distasteful by the moralisings and the core of very good sense concealed by a cloud of sentiment. It is suggested, for instance, that the fact that memorials "are intended to render homage to others is an additional reason why their lettering should receive the most considered attention and the best work we can give," which contains some sort of implication that, since memorials need this differentiation, other kinds of lettering need not receive the very best work. This obsession for memorials is seen more in the choice of illustrations than in the text, which is mostly concerned in a superficial way with general considerations affecting all lettering. The most important, in so far as it is most universal, use of lettering now is in street and other public notices, yet of something over forty photographs, twenty are of very decent but mostly quite commonplace memorials to dead men. There are four examples only of shop facias and none of the most important type of all, offering the most scope for imagination: direction signs in roads and public places, except one from the B.B.C., the mincing elaboration of which is appropriate. "Quiet must be observed in the vicinity of this echo room."

The best groups of illustrations are those of lettering in book production and advertising; the latter is introduced by a lively chapter by Mr. Haughton James. In advertising work many of the most significant developments of lettering can be found at their best. The absence of the pedantry that characterises most "architectural" work is happily absent, the direct emotional appeal of good lettering is used amusingly and with understanding, the ephemeral character of most of it is a cheerful antidote to the sanctimonious memorialising attitude commented on above, and, by the way, advertising work attracts, because of this freedom a large proportion of the best craftsmen in the art. It is to this chapter and to the book production chapter that architect readers should turn for ideas. In the book chapter the architect will find any number of examples of lettering used with a sympathetic sense of colour and space. The absence of pedantry noticeable also in the advertisements is seen here and the examples are wisely chosen to represent almost every variety of work.

Writing is the basic art from which all more formal types of lettering have developed. Unfortunately, writing, which takes the first part of the *Studio* book, has been more hopelessly affected by "artiness" than almost any other contemporary art. But art writing in a variety of italic, gothic and half-uncial forms has become inbred. When, under the stimulus of Morris, writing first regained the vigour which it had lost for several centuries, the whole art accorded well with the playful and deeply sincere mediaevalism that characterised that period and later, when Edward Johnston showed what a grand basis writing was for the whole art of lettering, it found renewed vigour as a school exercise; but the small demand that there is for this writing until the next war makes a demand for more rolls of honour has forced the scribes to exercise their talent by inscribing giggly little poems and sententious excerpts from high-minded authors. Certainly they are not producing work which can justify the place and space it takes in this book either on account of its social or art values. Mr. Alfred Fairbank's chapter on handwriting is good, but here, too, there is evident an infuriating unctuous superiority. The scraps of really informal writing by Stanley Morrison and Ellis Howe are worth all the oh-so-self-conscious neatnesses "just dashed off" by the other chosen correspondents.

#### PRAGUE AND BRATISLAVA

As an outcome of the friendly interchange of compliments between the R.I.B.A. and architects in Czechoslovakia, we have received through Dr. Babánek, of the University of Technical Sciences, Brunn, some interesting books on Czechoslovakia, including a beautifully illustrated guide to the Bratislava Stadtmuseum, containing photographs of the buildings of the Apponyi Palace, built at the end of the 18th century, and the old Town Hall, in which the museum is housed, and of the chief exhibits. These are paintings and *objets d'art* relating to Bratislava and its history in all periods. The city archivist is Dr. Ovidius Faust, who is author of another book from Bratislava, a guide to the history and buildings of the town.

We have also received a guide to Prague, an attractively presented booklet of photographs of the city and surrounding country, and a technical handbook on the latest Czechoslovakian practice in the design and manufacture of reinforced concrete telegraph poles and masts. The chief interest for us is the high quality of the design of functional engineering units such as this. These two volumes were presented at Dr. Babánek's request by *Ostřetový Odbor Hlavního Města, Prague*.

We are most grateful for these gifts, which add substantially to the representative character of the library.

#### BEAUTIFUL BRITAIN: A CALENDAR FOR 1938 BY "COUNTRY LIFE"

*Country Life* has published in good time for the overseas Christmas posts a 1938 calendar of photographs of "Beautiful Britain." There is a picture for each week of the year, well printed in half-tone on a page about twelve and a half by eleven inches. The subjects are of natural scenes and life and architecture in town and country from all over Britain. They are chosen with great imagination: the usual scenes, which quite properly are in a calendar of this type—the Cornish Coast, St. Paul's Cathedral, Hampton Court, the country lane—are exceptionally good, but the outstanding feature is the skill with which fresh views and subjects have been found so that the calendar excites one's interest as well as one's pleasure

in pretty photographs. The photographs, almost without exception, are of superlative excellence. Such an excellent calendar does not "just happen," and it would have been nice to have been told who was the designer of it. This is a present which any discriminating architect may be proud to give.

#### SUFFOLK

TO SUFFOLK (from Sparrows and Other Poems). By C. H. Lay [F.]. London: St. Catherine's Press, 1937. 1s.

A poet's love may in his verse find a form of expression which he dares to make public, but he knows, well enough, that the only person who will be able to appreciate it to the full is the person to whom it was first addressed and who is the one and only subject of it, or perhaps his rival lovers, who at the worst may cavil at his understatement. Mr. Lay has published his affection for Suffolk knowing, no doubt, that Suffolk men only who have been bewitched into the love of the county that no strangers can understand will be able to go all the way with him. His gentle, warm phrases are close to the simplicity of the Suffolk scene and climate and people, and the theme of his poem shows the strength of the silky thread, of sentiment, that ties Suffolk people to their small, uneventful valleys and eastern heaths. The urge to go to more exciting countries, to take more exciting paths than Suffolk offers, comes, "yet here I stay and years go by, and Suffolk knows the reason why."

Mr. Lay's verse-making is easy and assured and entirely free from attempts of over-dramatic sentiment. The allusions and pictures are delicately framed by an obvious sincerity. This is a picture poem that all who like poetry will enjoy, but (to end where this note began) essentially it is an expression of sentiment which those who have shared Mr. Lay's love of Suffolk will appreciate to the full.

#### RACIAL INFLUENCE ON HOUSING TYPES

RASSE UND WOHNUNG IN DER GROSSEN AGGLOMERATION. By R. Heiligenthal. 8vo. 91 pp. + 20 plates. Heidelberg: Carl Winter, 1937. 5.50 RM.

This is a concise study by the director of the Town Planning Institute of the Technical High School at Karlsruhe of urban types of houses developed since the seventeenth century. It is the eighth volume of a series dealing with "Siedlungen"—modern German open housing development consisting of single-family houses.

The study is based on the racial theories first expounded by the Frenchman A. de Gobineau, in 1853, in an essay on "The Inequality of the Races of Mankind," which has now become one of the gospels of Nazi research.

Taking de Gobineau's demarcation of the Aryan sphere in Europe and elsewhere, Dr. Heiligenthal shows that in the capital towns within that sphere single- and two-family houses predominate and outside it multi-storied houses predominate. Photographs show the influence of non-Aryan races on building types in Paris, Vienna and so on.

The book is interesting as a typical example of modern German scholarship.

J. H. L.

#### THE JOURNAL OF THE ROYAL VICTORIAN INSTITUTE OF ARCHITECTS

The Royal Victorian Institute of Architects, which is centred at Melbourne, has recently extended and improved its journal, which in the past has been one of the best overseas society papers. In the Editorial of the July number it is explained that the Institute's objective is to make their journal a publication of which they may be proud, in which their members, subscribers, advertisers and others may find the widest interest and value. The journal is now so widely read throughout Victoria that a majority of the practising architects who are not members of the Institute subscribe. There could, it would seem, be no higher tribute.



## Review of Periodicals

*Attempt is made in this review to refer to the more important articles in all the journals received by the Library. None of the journals mentioned are in the Loan Library, but the Librarian will be pleased to give information about price and where each journal can be obtained. Members can have photostat copies of particular articles made at their own cost on application to the Librarian.*

Reprints of these reviews, printed on slips suitable for cutting up and mounting on cards, can be had from the Library. A subscription of 5s. covers a year's issues.

All the journals received in the Library (about 200) are indexed, reference being made to all important articles and illustrations so that subscribers can have a constantly expanding index to practically every type of building illustrated in the architectural journals of the world.

Members wishing to have reprints of all previous issues can do so on payment of 3d. per issue to the Librarian Editor.

It is hoped to print them on gummed paper as soon as a large enough number of members subscribe.

### SCHOOLS

THE ARCHITECTS' JOURNAL. 1937. 4 and 11 November. PP. 699 and 753.

The Planning of Schools. I—Introduction, Divisions of State Education and School Policies. II—Nursery and Infant Schools.

BAUWELT (BERLIN). 1937. 28 October. P. 1 (Inset).  
The Alexis Kivi-School, Finland, by G. Tauchen.

BATIR (BRUSSELS). 1937. October. P. 1403.  
Architecture and education. An issue devoted to schools.

ARCHITETTURA (MILAN). 1937. August. P. 455.  
The Giulio Cesare College in Rome, by C. Valle.

### VETERINARY COLLEGE

THE BUILDER. 1937. 12 November. P. 873.  
The Royal Veterinary College, Camden Town, by H. P. G. Maule [F.].

### MUSEUMS AND EXHIBITIONS

THE ARCHITECTURAL REVIEW. 1937. November. P. 177.

THE ARCHITECTS' JOURNAL. 1937. 4 November. P. 709.

THE ARCHITECT AND BUILDING NEWS. 1937. 5 and 12 November. PP. 166 and 201.

New Zoo at Dudley. The layout, which includes 15 buildings, is by Tecton.

ARCHITETTURA (MILAN). 1937. April. P. 193.  
Exhibition of technical instruction, Rome.

ARCHITETTURA (MILAN). 1937. April. P. 181.  
Plan for the 1941 International Exhibition in Rome.

BOUWKUNDIG WEEKBLAD ARCHITECTURA (AMSTERDAM). 1937. 16 October. P. 401.

The natural and artificial lighting of the municipal museum at The Hague.

### SHOPS

THE ARCHITECT AND BUILDING NEWS. 1937. 12 November. P. 213.

The first British Railways ticket and parcels office. The result of the competition for a standard design. H. T. Cadbury Brown [A.].

THE ARCHITECTS' JOURNAL. 1937. 11 November. P. 736.  
Electricity showrooms, Willesden, by Parker and Marshall [A.A.].

MODERNE BAUFORMEN (STUTTGART). 1937. November. P. 541.

The Neumarkt Passage, Cologne; planned as an attractive shopping arcade, under two new buildings, to reduce pedestrian traffic at an adjoining narrow street junction.

### INDUSTRIAL

BAUKUNST (BERLIN). 1937. October. PP. 329 and 337.  
Mining buildings in Oberbayern, by Schupp and Kremmer, and factory buildings at the Hansa-Lloyd-Goliath works in Bremen, by R. Lodders.

BAUKUNST UND STÄDTBAU (BERLIN). 1937. November. P. 385.

Offices and hangar at the Henschel airplane works.

### TRANSPORT AND BRIDGES

LA CONSTRUCTION MODERNE (PARIS). 1937. 24 October. P. 75.

The new airport at Le Bourget. Architect: G. Labro.

IRISH BUILDER AND ENGINEER. 1937. 30 October. P. 943.  
The buildings at Cologne Airport, by H. Mehrtens.

L'ARCHITETTURA ITALIANA (TURIN). 1937. No. 9. P. 262.

Four recent bridges at Verona.

### COMMUNITY BUILDING

THE ARCHITECTS' JOURNAL. 1937. 4 November. P. 709.  
Village Hall at Old Coulsdon, by R. Gardner-Medwin.

### HOSPITALS, ETC.

THE BUILDER. 1937. 5 November. P. 830.  
Day nursery and sunlight clinic, Islington, by E. C. P. Monson [F.].

BAUWELT (BERLIN). 1937. 28 October. P. 1 (Inset).  
Women's clinic, by J. Paatela (Finland).

BAUGILDE (BERLIN). 1937. 25 October. P. 1010.  
District hospital at Vaihingen, by W. Bäumer.

L'INGEGNERE (ROME). 1937. No. 15. P. 413.  
Project for a hospital at Ravenna examined in detail.

L'ARCHITETTURA ITALIANA (TURIN). 1937. No. 9. P. 255.

Heliotherapeutic colony at Vercelli.

### SPORTS BUILDINGS

R.I.B.A. JOURNAL. 1937. 26 June. P. 830.  
An article on the requirements of the British Youth Hostel, with five recent examples.

BAUWELT (BERLIN). 1937. 28 October. P. 1. (Inset).  
National sports centre in Vierumäki, by E. Bryggman.

### THEATRES AND CINEMAS

THE BUILDER. 1937. 5 November. P. 835.  
The Prince of Wales Theatre, Coventry Street, rebuilt by R. Cromie [F.].



THE BUILDER. 1937. 12 November. P. 882.  
Odeon Cinema, Leicester Square, by Mather & Weedon [F. A.].

BYGGKUNST (OSLO). 1937. October. P. 191.  
Competition designs for a cinema building containing two auditoriums.

## DOMESTIC

R.I.B.A. JOURNAL. 1937. 17 July. P. 901.  
Two reinforced concrete houses, by Connell, Ward and Lucas [L. I. & L.].

THE ARCHITECTURAL REVIEW. 1937. November. PP. 187 and 195.

A house near Kingston, Surrey, by E. Maxwell Fry [F.].  
An excellent example of good modern English work.  
Barrie House, luxury flats at Lancaster Gate, by Howard Leicester and Partners.

THE ARCHITECT AND BUILDING NEWS. 1937. 12 November. P. 193.

Viceroy Court, Regent's Park. Flats by Marshall & Tweedy [FF.].

MODERNE BAUFORMEN (STUTTART). 1937. October. P. 525.

Domestic interior decoration and furnishing.

MODERNE BAUFORMEN (STUTTART). 1937. November. P. 571.

Prinzenhof Restaurant and luxury flats in Cologne. A pleasant building, faced with oiled travertine, by H. H. Lütgen.

DOMUS (MILAN). 1937. September. P. 1.

Two small framed blocks of flats in the modern manner.

BYGGMÄSTAREN (STOCKHOLM). 1937. No. 33. P. 368.  
A series of plans and photographs of American bungalows, mostly in timber.

## FARMS

R.I.B.A. JOURNAL. 1937. 14 August. P. 925.  
Dairy Farms. An important article by I. Williams [A.].

## CONSTRUCTION

BUILDING. 1937. November. P. 501.

Fire resistance in buildings. Notes on the grading of fire resistance of buildings and building elements and a tabular digest of rules of the fire offices' committee for fire-resisting construction.

## EQUIPMENT

THE NATIONAL BUILDER. 1937. November. Supplement. P. 3.

Domestic Heating—I. Grates and stoves for solid fuels, by H. A. J. Lamb [A.].

JOURNAL OF THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS. 1937. October. PP. 345 and 365.

Gas and coke for central heating and hot-air generation, by F. L. Atkin.

Notes on American methods of heating and ventilation, by C. S. K. Benham.

THE ELECTRICAL REVIEW. 1937. 5 November. P. 631.  
Air conditioning, article by E. M. Ackery.

NATIONAL BUILDER. 1937. October. Supplement P. 3.  
Article on kitchen sinks.

ARKITEKTEN (COPENHAGEN). 1937. No. 6.  
Electric kitchens. An important Danish reference.

## LAW

R.I.B.A. JOURNAL. 1937. 26 June. P. 813.  
Party structure procedure in London, by L. Sylvester Sullivan [F.].

## HISTORICAL

GAZETTE DES BEAUX-ARTS (PARIS). 1937. October. P. 161.

The stables of Versailles.

BULLETIN OF THE SOCIETY FOR RESEARCH IN CHINESE ARCHITECTURE (PEIPING). 1937. No. 4. June.  
Pagodas of the Tang and Sung periods.

GAZETTE DES BEAUX-ARTS (PARIS). 1937. September. P. 93.

Chateaux et Jardins de l'Île de France.

## BIOGRAPHICAL

PENCIL POINTS (NEW YORK). 1937. October.  
Homage to the late Victor Laloux from many of his former American pupils.

COUNTRY LIFE. 1937. 2 October. P. 348.  
A Georgian sculptor discovered. Charles Stanley (1703-61) and his English colleagues. Article by Katharine A. Esdaile.

## TOWN PLANNING

JOURNAL OF THE TOWN PLANNING INSTITUTE. 1937. October.

Three recent Papers: Town Planning the County of London, by H. Berry (Chairman, L.C.C. T.P. Committee); Town Planning the City of London, by E. E. Finch; Town Planning in Moscow and Manchester compared, by Sir E. Simon.

ARCHITETTURA (MILAN). 1937. September. P. 541.

Article on the town planning and development of London.

CHANTIERS (ALGIERS). 1937. October. P. 456.

The new town of Ouargla. Town planning in the Sahara.

## GARDENS

THE ARCHITECTURAL REVIEW. 1937. November. P. 201.  
The evolution of the 19th-century garden, by Christopher Tunnard.

The romantic garden in the 19th century. Redleaf, Penshurst, laid out by William Wells.

L'ARCHITECTURE REVUE MENSUELLE (PARIS). 1937. 15 October. P. 343.

Gardens at the Paris Exhibition.

## GENERAL

THE ARCHITECTURAL REVIEW. 1937. November. P. 165.  
Black and White. An attempt to isolate an idiom of decoration and design peculiar to this country, by J. M. Richards.

R.I.B.A. JOURNAL. 1937. 26 June. P. 805.

Architecture and Science, by J. D. Bernal.

APXNTEKTIYPA (MOSCOW). 1937. No. 7-8.

Report of the first conference of Soviet architects.

THE ARCHITECT AND BUILDING NEWS. 1937. 29 October. P. 122.

A series of illustrations of work, by Mr. H. S. Goodhart-Rendel [President].

ILLUSTRATED CARPENTER AND BUILDER. 1937. 29 October. P. 1152.

Building in Russia. The first of a series of articles by C. B. Parkes [L.].

## Notes

### THE CONCERT PROGRAMME FOR 6 DECEMBER

The concert on 6 December starts at 8.15. The following is the programme. Other details are given in the editorial paragraphs.

#### PIANO SOLO :

"Kinderszenen" .. .. . Schumann

#### FLUTE SOLO :

"Sonata in B Flat Major" .. .. . Handel

"Scène des Champs-Élysées" .. .. . Glück

#### SONGS :

"L'Invitation au Voyage" .. .. . Duparc

"Bergère légère" .. .. . Weckerlin

"Maman, dites-moi" .. .. . Weckerlin

#### SONGS WITH FLUTE :

"Ariette d'Hypolyte et Aricie" .. .. . Rameau

"Pan's Piping" .. .. . Granville Bartock

"The Russian Nightingale" .. .. . Alexander Alabiéff

#### FLUTE SOLO :

"Pièce" .. .. . Faure

"Pièce en forme de Habenera" .. .. . Ravel

"Le Petit Nègre" .. .. . Debussy

#### SONGS :

"The Cautious Maid" .. James Hook, arr. Ella Feinney

"Marvell and I" .. .. . Angela Burney

"To One who passed Whistling through the Night" .. .. . Armstrong Gibbs

"Knock on the Door" .. .. . Bainbridge Grist

"I Heard a Piper Piping" .. .. . Arnold Bax

"The Song of the Palanquin Bearers" .. .. . Martin Shaw

#### PIANO SOLO :

"Ballade in A Flat Major" .. .. . Chopin

"Prelude in B Flat Minor" .. .. . Chopin

### DANCE CLUB

The remaining three dances organised by the R.I.B.A. Dance Club will be held on the following dates:—Friday, 17 December 1937, Tuesday, 4 February 1938, Tuesday, 22 April 1938. Tickets 6s. each.

Particulars can be obtained from Mr. R. W. H. Robertson, Clerk to the Dance Club, at the R.I.B.A.

### APPOINTMENT VACANT

A large company in the Midlands has an appointment vacant for a chartered architect, under 40, to control their Survey Department. The salary starts at £1,000. Applications should be made to Box No. 6117, c/o Secretary R.I.B.A.

### THE SHELDONIAN THEATRE REPAIRED

In the article under this title published in the last JOURNAL (8 November 1937), we said: "During the nineteenth century some new entrances or vomitories into the first or ladies' gallery were made by an architect whose name cannot be traced." Mr. G. Flint Clarkson [A.] subsequently informed us that this work was carried out by Messrs. Smith & Brewer, a fact which appears to have been forgotten at Oxford. Mr. J. A. Meikle [F.], the present head of the firm, has kindly lent us the drawings, from which the full extent of the work done by Messrs. Smith & Brewer can be discerned. Among the drawings are several sheets of a survey, dated April 1906, showing the theatre before the alterations. These reveal that at that time, besides the two main stairs in the corners of the south side (see plans on page 27 of JOURNAL 8 November), there were two narrow, steep stairs ascending from the ground floor to each of the two rostrums and also two staircases, mostly winders, on the curved north side of the plan serving both the ladies' and undergraduates' galleries. These last two staircases were to have been rebuilt under the scheme of Messrs. Smith & Brewer, but they are marked "Omit" in red ink on the sketch plans and were eventually rebuilt in 1935 by Mr. Fielding Dodd. Messrs. Smith & Brewer appear to have carried out three items of work. The first was some alteration to the basement and the ceiling over it; the second the provision of two additional removable banks of seating at the south end in front of the ladies' gallery (see views on page 30 of JOURNAL 8 November); the third was the provision of the new vomitories to the ladies' gallery. Inside existing doors on the east and west lobbies were formed from each side of which stairs ascend to the gallery above. The construction is in steel and concrete, faced with oak panelling. This steel and concrete work is shown in detail on the drawings of a firm of specialist sub-contractors, then something of a rarity, particularly in this class of work. The work is not reinforced concrete in the now accepted sense of the term, namely, concrete in which steel bars are embedded, but consists of light R.S.J. framing infilled with concrete. The various working drawings are dated to the summer months of 1906.

### A.G.B.I. MAINTENANCE SCHOLARSHIP IN ARCHITECTURE

On the recommendation of the Board of Architectural Education of the Royal Institute of British Architects, the Artists' General Benevolent Institution have awarded a Maintenance Scholarship of £100 per annum to Mr. D. S. Craig to enable him to take the course at the Architectural Association School of Architecture, London.

### LIVERPOOL ARCHITECTURAL SOCIETY

#### A CHRISTMAS DANCE

A Christmas Dance is again to be held in the Bluecoat Chamber Hall, School Lane, Liverpool, 1, on Friday, 3 December, from 8.15 until 2. All members of the R.I.B.A. and their friends are invited. Tickets (price 1cs. 6d. double, 6s. single) are obtainable from H. Banister [A.], 66 Rodney Street, Liverpool, 1. Telephone No. Royal 1474.

## Notes from the Minutes of the Council

18 OCTOBER 1937

*The Work of the Session*

The President made a brief statement regarding the chief items in the programme of work which lay before the Institute, the Council and Committees during the forthcoming Session.

*The R.I.B.A. Statutory Examination for District Surveyors, October 1937*

The Board of Architectural Education reported that at the Examination held in October two candidates sat, of whom the following was successful:—

Mr. James H. Ogden.

*The R.I.B.A. Examination for Building Surveyors, October 1937*

The Board reported that five candidates sat for this Examination, and that the following were successful:—

Mr. John Davies

Mr. Stanley E. Thompson.

*Model Building Bye-laws*

A report was submitted from Mr. Eric W. B. Scott [F.], the R.I.B.A. representative on the Ministry of Health Advisory Committee on Model Building Bye-laws.

It was agreed to convey the warm thanks of the Council to Mr. Scott for his report and for acting as the R.I.B.A. representative on the Advisory Committee and to forward his report to the Science Standing Committee for their information.

*Report of the Trunk Roads Joint Committee of the C.P.R.E.*

On the recommendation of the Art Standing Committee it was agreed to write to the Ministry of Transport expressing approval of the report of the Joint Committee and urging that the terms of the report should be borne in mind.

*Centenary of the Swiss Society of Engineers and Architects*

It was reported that Professor Otto Rudolf Salvisberg, Honorary Corresponding Member, had represented the R.I.B.A. at the Centenary Celebrations of the Swiss Society of Engineers and Architects from 4 to 7 September.

A letter was submitted from the Swiss Society thanking the Council for the congratulatory address which had been sent by the R.I.B.A.

*The R.I.B.A. Architecture Bronze Medals**The Leicester and Leicestershire Society of Architects*

The award of the Jury in favour of the Imperial Typewriter Company's Offices, East Park Road, Leicester, designed by Messrs. Pick, Everard, Keay [F.] and Gimson, was formally approved.

*The Liverpool Architectural Society*

The award of the Jury in favour of the Mersey Tunnel Ventilating Building, Woodside, Birkenhead, designed by Mr. Herbert J. Rowse [F.], was formally approved.

*National Parks*

On the recommendation of the Town Planning, Housing and Slum Clearance Committee, the following resolution was passed for transmission to the Minister of Health:—

That the Council of the Royal Institute of British Architects welcomes the interest in National Parks which the Ministry of Health has shown in receiving the deputation of the National Parks Standing Committee, and urges the Government, through the Ministry, to set up without further delay a National Park Authority, as recommended in the 1931 Report, and to take all other necessary steps to ensure the preservation and dedication, as National Parks for open-air recreation, of suitable areas in England and Wales and in Scotland.

*XIVth International Congress of Architects, Paris, 19-25 July*

A report was submitted by Lt.-Col. H. P. Cart de Lafontaine [F.] on the proceedings at the XIVth International Congress of Architects.

It was agreed to express the Council's thanks to Dr. H. V. Lanchester [F.] and Colonel Lafontaine for acting as the official R.I.B.A. delegates at the Conference, and it was agreed to publish Colonel Lafontaine's report in the JOURNAL.

*Court of Governors of the University College of the South West of England*

Mr. John Bennett [F.] was reappointed as the R.I.B.A. representative on the Court of Governors of the University College of the South West of England.

*Lectures on Architecture*

A memorandum was submitted from the Public Relations Committee on the present organisation of lectures on architecture to the general public and containing recommendations with regard to the future.

It was resolved that the proposals contained in the memorandum be approved and that the cordial thanks of the Council be conveyed to the Public Relations Committee and the Sub-Committee responsible for the preparation of the memorandum.

*Revision of the Scale of Professional Charges*

On the suggestion of the Chairman of the Practice Standing Committee the question of ratifying the amendment to Clause 2 (a) of the Scale of Charges, provisionally approved at the Council meeting on 21 June, was deferred pending a further report from the Practice Committee on the matter.

*Membership*

The following members were elected:—

As Hon. Fellows	2
As Hon. Corresponding Members	9
As Fellows	6
As Associates	25
As Licentiates	6

*Election, 6 December 1937*

Applications for membership were approved as follows:—

As Fellows	9 applications
As Associates	111 "
As Licentiates	13 "

*Election, 7 February 1938*

Applications for membership from overseas candidates were approved as follows:—

As Fellows	3 applications
As Associates	8 "

*Reinstatements*

The following ex-members were reinstated:—

As Fellow:	Elias Cosmas Henriques
As Associates:	George Alan Burnett
	Carmen Joseph Dillon
	John Arthur Carter Moffat
	Fred Ratcliff
	Lionel Ernest Skipwith
As Licentiates:	Archibald John Joynson
	Leonard Moseley
	Henry Edward Tufton
	William Henry Herbert Marten

*Transfer to the Retired Members' Class*

The following members were transferred to the Retired Members' Class:—

As Retired Fellow:	Arthur Keen
As Retired Licentiate:	Joseph Arthur Coe

A special letter of thanks was sent to Mr. Arthur Keen for his many years of devoted service to the Institute.

*Resignation*

The following resignation was accepted with regret:—

Charles Frederick Siebert [L.].

## Obituaries

### JOHN RUSSELL POPE [*Hon. Corr. Member*]

John Russell Pope, who died last August, at the comparatively young age of 63, was one of the American architects best known to Englishmen. Pope was the supreme example of the purest orthodox School of Rome, Ecole des Beaux Arts strain. His works had a scholarly perfection not untinged with some emotional quality of absolute belief in the universal validity of classical architecture that was convincing even to those who criticised the seeming rigidity of his faith. Englishmen knew of Pope chiefly because in recent years he had received a number of important commissions in this country, notably the extension to the British Museum sculpture galleries and the recent addition to the Tate Gallery, his commission in both instances having been due primarily to Lord Duveen, the donor of the galleries. The Tate Gallery extension in this country has been subject to just such critical analysis as Mr. Russell Pope's latest and as yet unexecuted memorial to Thomas Jefferson in the United States has received from American architects. All the expected vituperation of modern American artists couched in such terms as "betrays the artistic integrity of the people," "a servile sham," "a cadaver," "useless and cold," "a forest of petrified columns" could not or cannot prove effective against a work which, if it may be useless and cold, has, as all Pope's work has, the very essence of classical nobility, and is an expression no less from the heart because it is also from the mind of the classic culture of "the ruling classes." John Russell Pope was born in 1874, in New York, a descendant of some of the oldest English settlers. After graduating at the School of Mines in Columbia University, he studied architecture in Europe and America, he was a student at the American Academy in Rome in 1894, and went from there in 1900 with a scholarship to the Ecole des Beaux Arts. His own practice began in 1903. Among the best known of his buildings are the National Archives building at Washington, which was exhibited at the R.A. recently in one of Pope's own immaculate drawings; the U.S. Embassy offices, London; buildings at Yale and Syracuse Universities and Dartmouth College, and perhaps best known of all, to Englishmen, the Montfaucon Memorial to U.S.A. troops in France. At the time of his death he was carrying out the National Art Gallery in Washington to house the Mellon Collection.

Russell Pope's appointments and honorary distinctions were many, he was a Fellow of the A.I.A. and an American National Academician, and was an Hon. Corresponding Member of the R.I.B.A. With his death revived classical architecture has lost one of its greatest exponents, perhaps the greatest, whose works are lasting memorials to the coherence and integrity of formal classic architecture and which are, dare we hope, as impregnable against the uncertain tides of loyalties as their ancient prototype.

In 1922 Russell Pope took into association with him Otto R. Eggers and Daniel Paul Higgins, who are now continuing his practice at 542 Fifth Avenue.

### SIR P. COLVILLE SMITH, C.V.O. [*Hon. A.*]

We regret to have to record the death of Sir Philip Colville Smith, C.V.O., the Grand Secretary of the United Grand Lodge of England, which took place on 5 November at the Freemasons' Hospital, London.

By his death Freemasonry has lost one of its most distinguished members. Born in 1862, he was educated at

Clifton College and St. John's College, Oxford, and was called to the Bar in 1899. He was initiated in the Apollo University Lodge in 1885, and it may be said that for over 50 years his life was spent in the service of Freemasonry—zealously and most sincerely.

Since his appointment as Grand Secretary in 1917 Freemasonry has grown amazingly, due largely to his energy and wise counsels; no fewer than 1,800 lodges under the English Constitution have been formed during the period, over 500 of which he himself consecrated.

Sir Colville Smith never wearied in his service to Freemasonry—in his own province of Cornwall, at Oxford among the undergraduates, in his missions abroad, and finally in that great administrative office of Grand Secretary.

A scholar, greatly interested in architecture and the Arts, he laboured unceasingly in that great enterprise the building of the Masonic Peace Memorial, and for these causes he was admitted as an Honorary Associate in 1929.

All his friends and all Freemasons deplore the passing of so loyal and devoted a Brother among Masons.

H. V. A.

### LEONARD MAGGS [*F.*]

We regret to record the death on 13 August of Mr. Leonard Maggs, Nottinghamshire County Architect.

Mr. Maggs, who was born in 1875, after being articled, worked as a junior assistant in London, and then became second assistant to Mr. A. J. Wood, of Stroud, with whom he worked on the Suffolk Mental Hospital, Melton, the Borough of Monmouth Mental Hospital, and the Mental Hospital at Thorpe, Norwich. After a short period as architectural assistant to the County Surveyor of Hertfordshire, he became in 1907 County Architect of Nottinghamshire.

In Nottinghamshire he was responsible for all the county buildings which the development of the Nottinghamshire coalfields made necessary, including technical colleges, elementary and secondary schools, school clinics, and child welfare centres, and large extensions to the County Mental Hospital.

### C. M. BENTLEY [*F.*]

We regret to record the death at the age of 39 of Mr. Clayton Moffat Bentley. He was the younger son of the late Mr. Robert Bentley [*L.*], and served his articles with Messrs. Moffat and Bentley. In 1918 he was appointed architect to the Whitehaven Colliery Co. This position he held until 1930, when he received the Lowther Estates appointment, in addition to which he carried on a private practice, and was surveyor to the Whitehaven Building Society.

Mr. Bentley held the Testamur of Municipal and Counties Engineers; was an Associate of the Institute of Structural Engineers, and a member of the Royal Sanitary Institute.

He did much good work in the town privately as a member of the Y.M.C.A. Committee, a manager of the Presbyterian Church, and a trustee of the Town Mission.

## ALLIED SOCIETIES

### PRESIDENTIAL ADDRESSES

This is the season when not only the R.I.B.A. but most of its Allied Societies hold their inaugural meetings and when it is borne home to Presidents that for one night's oration at least they have to maintain autumn's reputation for mellow fruitfulness and, if autumn has dangers, to avoid the mists which poets find so pleasant. Anyone whose pleasure it is to read these presidential addresses must be impressed by the variety of interests which engage architects' minds and are important enough to demand some notice on these public occasions. National planning in all its aspects, housing, these particularly seem to dominate, the infinitely wide problems of modern design in all its relationships to structure, plan and art. Local problems, of course, take their share, and prominently, because the presidential platform is one which in almost every place will excite attention from local people of importance, and give good "copy" to the local Press.

The inaugural meetings of the Hampshire and Isle of Wight A.A., the Manchester Society of Architects, the Birmingham and Five Counties A.A., and the Notts, Derby and Lincoln Architectural Society have all been held within the last few weeks, and we have received also a report of the golden jubilee dinner of the Sheffield, South Yorks and District Society.

The Hants and I.O.W. architects held their annual meeting on Friday, 22 October, when Mr. A. L. Roberts, who has distinguished himself for many years as the Association's active honorary secretary, took the presidential chair. Mr. Roberts is the first official architect to be president of his society, and naturally dealt with aspects of practice which had come within his experience, such as rural housing. He emphasised the defect in the present Housing Act, which made it impossible for authorities to consider reconditioning a slum area as an alternative to demolition, and in this connection spoke at length about the Newlyn *cause célèbre*. He also referred to the dangers of sale for reconditioning on such terms that the houses are changed from being workers' dwellings to week-end cottages for a wealthier class. Mr. Jack, of the C.P.R.E., put up a vigorous and effective defence of the C.P.R.E., which he claimed was absolutely innocent of any action which might have this result.

Mr. Cooke at Birmingham also discussed the value of the panel system, and the use that his Society could be to the local authorities in its area by appointing panel members and giving general advice on matters of amenity.

Mr. Roberts, Mr. W. A. Johnson in his address at Manchester, and Mr. W. G. Watkins at Nottingham, and Mr. S. N. Cooke at Birmingham all were drawn, each in a different way, to tackle the all-pervading problems of modernism, the conflict between the affection for the past, which must be felt by anyone senior enough in the profession to rise to presidential authority, and the pressure forward of economic circumstance, new materials, and needs.

The general note was one of confidence and optimism, modified by signs of nervous caution. Mr. Watkins, after words of caution against too easy acceptance of the glib signs of modernism, said that he felt perfectly satisfied that the present trend was sane and healthy, that better work was being produced now than at any time in his generation, and that still better would be produced in the future. Mr. Johnson, whose whole paper was on "The architect's part in contemporary life," spoke progressively and vigorously with a weather eye on economics and politics. The solution of the housing problem, for instance, he saw must be found not by endless subsidising but by raising the income level so that people could afford to live in the houses they need.

Mr. Cooke and Mr. Roberts both discussed the practical aspects of change in materials and methods, and the effect of these changes on professional status. Mr. Roberts passed to a subject which was also discussed at length by other speakers—Registration.

Another matter which was discussed, notably by Mr. Watkins, was the application of the new R.I.B.A. salary scales. Mr. Watkins considered that it was difficult to see how the scale suggested for principals could be more than a pious hope until Registration had been attained to back the hope with forceful action. He foresaw a considerable increase in the number of architects employed by local authorities, but pleaded, as did Mr. Goodhart-Rendel in London, for an intelligent use of private practitioners, and greater use of the competition system. To say this, he claimed, was not "touting for work," as some irresponsible critics had affirmed. Mr. Watkins and Mr. Roberts both discussed education in its relation to Registration and the general quality of the profession. Mr. Watkins considered that although the pupilage system was dead, the pendulum had swung too far, and that school education tended to be too academic. Mr. Roberts particularly referred to the opportunities provided by the existing system for poor boys to enter the profession. There was every facility available, he claimed, for a boy without means to study for and enter the profession if he possessed the necessary ability.

The jubilee dinner of the Sheffield, South Yorks and District Society was a great event. Mr. J. Amory Teather was in the chair, and the principal speakers included the Master Cutler, who spoke of Sheffield's prosperity and of the hope that clearance areas in the city would be wisely used to provide housing for workers near to their work places. The Lord Mayor (Mrs. A. E. Longden) spoke, and Sir William Rothenstein, in proposing "the R.I.B.A.," pleaded that housing estates should be provided with cultural amenities, and Sir Charles Nicholson pointed out the social dangers of "one class" housing estates, and Professor Abercrombie, in a speech responding for the R.I.B.A., praised its catholicity.

A general survey of speeches such as these, all of first importance not only in the particular localities in which they were delivered, cannot give any complete impression of the quality and vigour that they represent. The strength of the R.I.B.A. can be said to depend to a very great extent on the activity and prosperity of its Allied Societies. No one reading these speeches can fail to be impressed that the Presidents are speaking as the chosen representatives of a vigorous profession aware of its responsibilities, eager to go forward, and competent to make the most of the chances that these times present.

### NORTHERN ARCHITECTURAL ASSOCIATION

#### CUMBERLAND BRANCH

#### OFFICERS AND COMMITTEE

The following list of the Officers and Committee of the Cumberland Branch of the Northern A.A. was received by the Institute too late for inclusion in the *Kalendar*, and is published here for general information.

*Chairman* : J. S. Stout.

*Senior Vice-Chairman* : S. W. B. Jack.

*Vice-Chairmen* : Percy Dalton, R. Merton Rigg.

*Hon. Secretary and Treasurer* : H. E. Ayris.

#### EXECUTIVE COMMITTEE :

*Chairman, Past Chairman, Vice-Chairmen, Hon. Secretary, J. Peascod, P. M. Hope, H. Foxall, F. Scott,*

*Auditor* : H. Foxall.

*Local Corresponding Secretaries* : G. R. Stout, Whitehaven Area ; P. M. Hope, Keswick Area ; R. A. C. Simpson, Workington Area ; R. Morton Rigg, Penrith Area.

*Branch Representatives, N.A.A. Council* : Chairman, Vice-Chairmen (3), F. Scott representing Associates, Hon. Secretary.

*Branch Representative, Allied Societies' Conference* : Hon. Secretary.



## MEMBERSHIP LISTS

## APPLICATIONS FOR MEMBERSHIP

## ELECTION: 18 OCTOBER 1937

In accordance with the terms of Byelaws 10 and 11 the following candidates for membership were elected at the Council Meeting held on Monday, 18 October 1937:—

## AS HON. FELLOWS (2)

P.R.H. THE DUKE OF GLOUCESTER, K.G., etc.  
HAREWOOD: The Rt. Hon. The Earl of, HENRY GEORGE CHARLES LASCELLES, K.G., G.C.V.O., D.S.O., T.D.

## AS HON. CORRESPONDING MEMBERS (9)

LUDM: SEDAD HAKKI, Professeur, Académie des Beaux-Arts, Istanbul, Turkey.  
GROPIUS: WALTER ADOLF GEORG, Dr. Ing. honoris causa, Professor of Architecture at Harvard University: Cambridge, Mass., U.S.A.  
G. AVREKIAN: GABRIEL, Architecte Conseil du Ministère de la Guerre: Ancien architecte-en-chef de la Municipalité de Téhéran: Ancien architecte-en-chef de la " Société Générale de Construction en Iran."  
KARANTINOS: PATROCLO, Membre du Conseil Supérieur d'Urbanisme: Architecte auprès du Ministère de l'Instruction Publique: Athens, Greece.  
PAULSSON: NILS BERNHARD GREGOR, Ph.D., Professor at the University of Upsala, Sweden.  
PERRET: AUGUSTE, Architecte en Chef des Bâtiments Civils et des Palais Nationaux: Officier de la Légion d'Honneur: Paris, France.  
SURT LOPEZ: JOSEP LLUIS, Barcelona, Spain.  
SIREN: Professor J. S., Helsingfors, Finland.  
TESSENOW: HEINRICH, Ordentlich Professor a.d. Technischen Hochschule, Berlin: Dr. Phil. h.c., Dr. Ing. h.c., Leiter eines Meisterateliers für Baukunst: a.d. Akademie der bildenden Künste, Berlin: Germany.

## AS FELLOWS (5)

ELKINGTON: HYLTON BASH, [J.I. 1910].  
MEIKLE: JOSEPH ABRAHAM [J.I. 1921].  
TEMPEST: FREDERICK WILLIAM [J.I. 1920], Mansfield.  
WINCH: KENNETH MARK [J.I. 1921].  
and the following Licentiate who has passed the qualifying Examination:—  
SPEIGHT: GILBERT GEORGE, Preston.

## AS ASSOCIATES (17)

BELL: ROGER HAYDOCK, B.Arch.L'pool [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Lurgan, Co. Armagh.  
BRISTOW: MAURICE HENRY [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination].  
COLLINS: ERIC VICTOR [Final].  
HAMILTON: IAN [Passed five years' course at the Armstrong College School of Architecture (University of Durham), Newcastle-upon-Tyne. Exempted from Final Examination], Newcastle-upon-Tyne.  
HENTY: MISS BARBARA, A.A.Dip. [Passed five years' course at the Architectural Association. Exempted from Final Examination].  
HUNT: WALLACE PADFIELD [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], Sheffield.

IRVINE: WILLIAM JAMES CASTILL [Passed five years' course at the School of Architecture, Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination], Aberdeen.

KENDREW: GILBERT FAVIELL [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination].

LEWIS: IDRIS JOHN, Dip.Arch. [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination], Cardiff.

LLOYD: MISS MARY ELIOT [Passed five years' joint course at the Birmingham School of Architecture and the Architectural Association. Exempted from Final Examination].

PORTER: THOMAS McEWAN [Passed five years' course at the Architectural Association. Exempted from Final Examination], Guildford.

ROWE: KENARD ROBERT CHARLES [Final].

SCOTT: WALTER SCHOMBERG [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], Kelso, Roxburghshire.

SENIOR: FRANK, Dip.Arch. (Leeds) [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination].

SMITH: STANLEY [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination], Cardiff.

TIBBITS: EDWARD VERNEY, A.A.Dip. [Passed five years' course at the Architectural Association. Exempted from Final Examination], Chichester.

WRIE: MISS ALVINA MABLIN, Dip.Arch. (Cardiff) [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination], Cardiff.

## AS LICENTIATES (6)

CARTER: JAMES, Windermere.  
GEDDES: CHARLES WILLIAM, Swansea.  
HALE: ALFRED JAMES.  
JONES: WILFRED LESLIE.  
LUTYENS: ROBERT.  
WALKER: FRANK HUGH, Windermere.

## APPLICATIONS FOR MEMBERSHIP

## ELECTION: 6 DECEMBER 1937

In accordance with the terms of Byelaws 10 and 11, an election of candidates for membership will take place at the Council Meeting to be held on Monday, 6 December 1937. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Byelaws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Thursday, 2 December 1937.

## AS HON. CORRESPONDING MEMBER (1)

AALTO: HUGO ALVAR HENRIK, Munkkiniemi, Riihitie 10, Helsingfors, Finland. Proposed by the Council.

## AS FELLOWS (9)

CLARK: ROBERT GIBSON [J.I. 1921], 101 Alfred Gelder Street, Hull: 2, Maple Grove, Garden Village, Hull. Proposed by Norman Culley, C. Donald Alderidge and Frederick J. Horth.

- FARMER: HENRY COLLINGWOOD [J.I. 1930], 5 Cumberland Place, Southampton; Shetcroft, Botley, Hants. Proposed by B. L. Sutcliffe, J. H. Beart Foss and Frank Scarlett.
- HARRIS: KENNETH WILLIAM FURNEAUX [J.I. 1930], Guildhall, Nottingham; 84 Russell Drive, Wollaston, Nottingham. Proposed by Professor S. D. Adthead, Sidney K. Greenslade and F. W. Troup.
- JORDAN: ROBERT FURNEAUX [J.I. 1928], 7 Gower Street, W.C.1; 10 Pembroke Court, Edwardes Square, W.8. Proposed by H. S. Goodhart-Rendel, L. H. Bucknell and J. Murray Easton.
- MAGGREGOR: JOHN ERIC MIERS [J.I. 1918], 20 Buckingham Street, W.C.2; 7 St. Peter's Square, W.6. Proposed by W. A. Forsyth, Basil Oliver and T. F. W. Grant.
- SMITH: FRANK HALIBURTON [J.I. 1926], 35 New Broad Street, E.C.2; 2 St. James' Square, W.11. Proposed by F. Adams Smith, Sir Banister Fletcher and Lionel G. Pearson.
- SMITH: JOHN FRANCIS GEORGE, F.S.I. [J.I. 1934], 3/4 Clements Inn, Strand, W.C.2; 5 Pearfield Road, Forest Hill, S.E.23. Proposed by Charles Cowles-Voysey, Sir Banister Fletcher and J. And. Minty.
- TAYLOR: EDGAR RICHARD [J.I. 1927], 5 Manchester Square, W.1; "Meadow Way," Cross Oak Road, Berkhamsted, Herts. Proposed by B. L. Sutcliffe, Edmund Wimperis and Sydney Tatchell.
- TAYLOR: JOHN ALEXANDER CHISHOLM, D.S.O., M.C., T.D. [J.I. 1919], Halifax Chambers, Oldham; Archer Cottage, Middleton, Lancs. Proposed by Fred. Thorpe, J. Herbert Heywood and Thos. J. Hill.

## AS ASSOCIATES (112)

- ALBARN: EDWARD [Final]. 69 Knighton Church Road, Leicester. Proposed by Frank A. Broadhead, W. J. Prince and George Nott.
- BAILLON: LOUIS BRABAZON [Final]. 189 Bush Hill, Northampton. Proposed by J. Stockdale Harrison, E. J. Williams and T. Trevor Sawday.
- BEAUCHAMP: CHARLES PHILIP, B.A.Cantab. [Final]. 78 Old Market Street, Bristol. Proposed by Harold Tomlinson, G. C. Lawrence and G. D. Gordon Hake.
- BENSON: JOHN FRANKS [Final]. Barrington House, Greatham, Billingham, Co. Durham. Proposed by Arthur Harrison, Thos. W. T. Richardson and R. J. Archibald.
- BINGHAM-POWELL: CHARLES HERBERT, B.Arch. [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination]. 21 Clanricarde Gardens, W.2. Proposed by Professor Lionel B. Budden, Edward R. F. Cole and J. Ernest Marshall.
- BOUCHER: CYRIL THOMAS GOODMAN [Final]. Old Parsonage House, Atlow, Ashbourne, Derbyshire. Proposed by George H. Widdows, E. G. Bax and Edwin Williams.
- BOWMAN: FREDERICK [Special Final Examination]. 3 Sniprley Drive, Durham City. Proposed by L. Stuart Stanley, F. Willey and John W. English.
- BOYD: ANDREW CHARLES HUGH [Passed five years' course at the Architectural Association. Exempted from Final Examination]. 26 Chalcot Square, Primrose Hill, N.W.1. Proposed by R. E. Enthoven, Howard Robertson and J. Murray Easton.
- BRAMLEY-TAYLOR: PETER [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination]. Hemsworth Lane Ends, nr. Pontefract, Yorks. Proposed by A. F. B. Anderson, Robert Atkinson and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- BUBB: SYDNEY JAMES, Dip.Arch.(Leeds) [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination]. "Olive Mount," High Green Road, Altofts, Northampton, Yorks. Applying for nomination by the Council under the provisions of Byelaw 3 (d).
- CAULDER: IAN FORTUNE [Final]. c/o New Zealand House, 415 Strand, W.C.2. Proposed by L. Stuart Stanley, W. B. Simpson and L. Rome Guthrie.
- CAMPBELL: ALEXANDER BUCHANAN [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination]. 49 St. Kilda Drive, Jordanhill, Glasgow, W.4. Proposed by T. Harold Hughes, William J. Smith and Norman A. Dick.
- CHEYNE: JOHN ROSS [Passed five years' course at the School of Architecture, Robert Gordon's College, Aberdeen. Exempted from Final Examination]. 17 St. John's Road, Bucksburn. Proposed by R. Leslie Rollo, James B. Nicol and John G. Marr.
- CLAESSEN: WILLIAM EDWARD [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination]. 34 Paignton Road, Childwall, Wavertree, Liverpool, 16. Proposed by Professor Lionel B. Budden, Francis X. Velarde and J. Ernest Marshall.
- COSTER: CECIL WALLACE [Final]. 56 Beddington Gardens, Wallington, Surrey. Proposed by L. Stuart Stanley, Albert J. Thomas and Laurence M. Gotch.
- CRANE: CHARLES VINCENT [Final]. 56 Waterloo Road, Bedford. Proposed by Frank H. Shayler, L. Stuart Stanley and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- CUNNINGHAM: JOHN JOSEPH [Final]. 1 Morden House, Morden, Surrey. Proposed by Oswald P. Milne, Serge Chermayeff and Joseph Emberton.
- DIXON: COLIN JACK [Special Final Examination]. 18 Airlie Gardens, W.3. Proposed by Howard Robertson, John Murray Easton and L. H. Bucknell.
- EYRE: OSBERT FYNES CLINTON [Passed five years' course at the Architectural Association. Exempted from Final Examination]. 27 Grove Terrace, Teddington, Middlesex. Proposed by A. Sunderland and the President and Hon. Secretary of the Architectural Association under the provisions of Byelaw 3 (b).
- FEVER: RICHARD ALFRED [Passed five years' joint course at the School of Architecture, The Polytechnic, Regent Street and the Architectural Association. Exempted from Final Examination]. 32 Lowlands Road, Eastcote, Middlesex. Proposed by L. H. Bucknell, Verner O. Rees and G. A. Jellicoe.
- FLETCHER: DAVID [Final]. Atherton House, St. Mark's Avenue, Salisbury, Wilts. Proposed by Sir George H. Oatley, G. D. Gordon Hake and G. C. Lawrence.
- FLOYD: JOHN PINCKSTON [Final]. 72 Sandwell Road, Handsworth, Birmingham, 21. Proposed by C. E. Bateman, Alfred Hale and John B. Surman.
- FOSTER: ROBERT OSWALD [Final]. 66 Palmerston Road, Buckhurst Hill, Essex. Proposed by R. C. Foster and the President and Hon. Secretary of the Architectural Association under the provisions of Byelaw 3 (b).
- FOX: JOHN MICHAEL, Dip.Arch.(Edin.) [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination]. Burnham House, Barnstaple, Devon. Proposed by B. N. H. Orphoot, Harbottle Reed and William H. May.
- GAVIN: ALEXANDER GIRAUD [Passed five years' joint course at the School of Architecture, University of Cambridge and the Architectural Association. Exempted from Final Examination]. Broomfield, Woodham Road, Woking. Proposed by J. Murray Easton, Julian Leathart and L. H. Bucknell.
- GERRARD: ARTHUR ELI [Final]. 5 Wharton Road, Headington, Oxford. Proposed by R. Fielding Dodd, N. W. Harrison and Thomas Rayson.
- GOOLDEN: HARRY [Passed five years' course at the Department of Architecture, University of Sheffield. Exempted from Final Examination]. Flat "D," 100 Addison Road, W.14. Proposed by Stephen Welsh, H. B. S. Gibbs and Graham R. Dawbarn.
- GRIFFITHS: FREDERICK WILLIAM, Dip.Arch.(Glasgow) [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination]. 5 Parkgrove Terrace, Glasgow, C.3. Proposed by Professor Lionel B. Budden, T. Harold Hughes and J. Ernest Marshall.
- HABGOOD: JOHN KENNETH [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination].

- c/o 11 Kilrea Road, West Derby, Liverpool. Applying for nomination by the Council under the provisions of Byelaw 3 (d).
- HAGGAR: ALAN ARTHUR [Final]. 79a North Street, Chichester. Proposed by C. G. Stillman, J. Auty and Harry Sherwood.
- HALL: WILLIAM RODNEY [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination]. "Elder Grove," 5 Dunkirk Lane, Halifax, Yorks. Proposed by C. E. Fox, Joseph F. Walsh and G. H. Foggitt.
- HARGREAVES: THOMAS [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination]. Doric Hotel, North Promenade, Blackpool, N.S. Proposed by Professor R. A. Cordingley, Major Halstead Best and J. C. Robinson.
- HARTLAND: CEDRIC EDWIN [Passed five years' course at the Architectural Association. Exempted from Final Examination]. 35 Hampstead Lane, Highbury, N.6. Proposed by W. R. Davidge and the President and Hon. Secretary of the Architectural Association under the provisions of Byelaw 3 (b).
- HAWKES: JAMES KENNEDY [Final]. "Lynton," Woodside Avenue, Esher, Surrey. Proposed by T. Frank Hawkes, H. S. Goodhart-Rendel and M. H. B. Scott.
- HERITAGE: GEORGE HENRY REGINALD [Final]. 2 The Homesteads, Muswell Hill, N.10. Proposed by H. R. Steele, F. W. Troup and C. D. Hawley.
- HICKS: EDWARD CHARLES COLEMAN [Final]. C/o C. E. Designs, W.D., Room 744, Adastral House, The Air Ministry, Kingsway, W.C.2. Proposed by William Walter Wood, Arthur F. C. Bentley and L. Stuart Stanley.
- HIRST: SYDNEY GEORGE [Passed five years' course at the School of Architecture, University of Sydney. Exempted from Final Examination]. c/o Australia House, Strand, W.C. Proposed by Vincent Kelly, Henry V. Ashley and F. Winton Newman.
- HODGSON: ARTHUR PHILIP [Final]. 286 Derington Road, Tooting, S.W.17. Proposed by Hubert M. Fairweather, H. S. Goodhart-Rendel and W. A. Pite.
- HOGGEN: DENNIS ALEXANDER [Final]. 69 Talbot Road, Winton, Bournemouth. Proposed by Edwin A. Jackson, H. Campbell Ashenden and L. Stuart Stanley.
- JACKSON: STANLEY JOHN HERBERT [Final]. 74 Greenvale Road, Eltham, S.E.9. Proposed by Joseph Addison, F. C. Bayliss and W. Fraser Granger.
- JADHAV: MAHADEO KRISHNAJI [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination]. 22 Howitt Road, N.W.3. Proposed by Professor A. E. Richardson, C. Lovett Gill and Matthew J. Dawson.
- JARDINE: ALEXANDER WHITELAW, Dip. Arch., Edinburgh. [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination]. 39 Pentland Terrace, Edinburgh, 10. Proposed by James Macgregor, John F. Matthew and Chas. J. Mole.
- JENKIN: DAVID CYNDYLLAN HUGHES [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination]. 97 Jersey Road, Hounslow, Middlesex. Proposed by Matthew J. Dawson, William H. Hamlyn and Professor A. E. Richardson.
- JOHNS: WILLIAM EDWARD FIELD [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination]. Hoe Lodge, 49 North Park, Eltham, S.E.9. Proposed by L. Stuart Stanley, J. O'Hanlon Hughes and Matthew J. Dawson.
- JOHNSTON: MISS AGNES FREELAND [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination]. "Monteviot," Kirkintilloch. Proposed by T. Harold Hughes, John Stewart and William J. Smith.
- KAYLL: RICHARD A. [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination]. Willersey, Broadway, Worcestershire. Proposed by Matthew J. Dawson, H. Edmund Mathews and L. Stuart Stanley.
- KEMP: REGINALD CECIL [Final]. 22 Queen's Road, Alton, Hants. Proposed by G. Maxwell Aylwin, John B. Chubb and Harold S. Sawyer.
- KILNER: DENIS SCOTT [Final]. 22 Chevallier Street, Ipswich. Proposed by C. B. Metcalfe, R. G. Roberts and L. Stuart Stanley.
- KINGHORN: ERNEST [Final]. 39 Malvern Street, Newcastle-upon-Tyne, 4. Proposed by J. A. Clarke, Lt.-Col. A. K. Tasker and G. E. Charlewood.
- LAURIE: WILLIAM KENNEDY [Special Final Examination]. 47 Argyle Street, Reading. Proposed by C. B. Willcocks, A. H. Powell and L. Stuart Stanley.
- LEWIS: ROBERT KENNETH [Final]. 9 Woodlands Avenue, Cheadle Hulme, Cheshire. Proposed by W. A. Johnson, L. Stuart Stanley and John B. Surman.
- LITTLE: RICHARD [Special Final Examination]. 5 Nab Wood Road, Shipley, Yorks. Proposed by J. A. Fletcher, Wm. Illingworth and F. N. Weightman.
- LOUGHER-GOODLEY: WILFRID DAVIS [Passed five years' course at the Architectural Association. Exempted from Final Examination]. The Chase, Halstead, Essex. Proposed by Howard Robertson, Guy Morgan and C. S. White.
- LUMB: ARTHUR [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination]. 19 Lord Street, Sowerby Bridge, Yorkshire. Proposed by William Broadbent, B. R. Gribbon and G. H. Foggitt.
- MACHIN: NORMAN CADWALADR [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination]. 37 Butts Road, Walsall, Staffs. Proposed by George Drysdale, John B. Surman and William T. Benslyn.
- MACINTOSH: LAURENCE ALAN [Final]. Lake Farm, Bletchingley, Surrey. Proposed by Hugh Macintosh, E. Brander Musman and Briant Poulter.
- MALLORIE: JOHN TRINDER [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination]. 4 The Riviera, Sandgate, Kent. Proposed by Professor Lionel B. Budden, the Hon. John Seely and John H. Markham.
- MARTIN: DAVID GRIFFITHS [Final]. 23 Randolph Crescent, W.9. Proposed by S. B. Caulfield, Basil Oliver and the Hon. John Seely.
- MCCLURE: JOHN [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination]. "Barnweil," Prestwick, Ayrshire. Proposed by T. Harold Hughes, William J. Smith and Eric A. Sutherland.
- MELLOR: HUGH VERNON [Final]. 125 Fordwych Road, West Hampstead, N.W.2. Proposed by David Thomson, P. K. Hanton and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- MILLER: KENNETH BRADLEY [Passed five years' course at the School of Architecture, Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination]. 11 Ashgrove Road, Aberdeen. Proposed by R. Leslie Rollo, James B. Nicol and J. A. O. Allan.
- MITCHELL: ERIC WALTER JAMES [Final]. "Havenfield," Wotton, Gloucester. Proposed by R. S. Phillips, Ernest G. Heathcote and W. E. Masters.
- MORRIS: NOEL ENNEVER SETON [Final]. 37 Onslow Gardens, Muswell Hill, N.10. Proposed by Dr. H. V. Lanchester, Sir Herbert Baker and T. A. Lodge.
- MORRISON: DAVID ELIJAH, B.A. (Arch.) [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination]. 18 St. Mary's Crescent, Hendon, N.W.4. Proposed by L. Stuart Stanley, L. Rome Guthrie and Matthew J. Dawson.
- MOSELEY: HORACE GEORGE [Final]. 44 Ardrossan Gardens, Worcester Park, Surrey. Proposed by J. H. Forshaw, J. A. Dempster and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- NIELD: DENZIL BRIDGE [Final]. 222 Strand, W.C.2. Proposed by George Ernest Nield, Sir Raymond Unwin and Joseph Addison.

- OSMAN: J. LOUIS, B.A.(Arch.) [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination]. 5 Lawn Road Flats, Hampstead, N.W.3. Proposed by L. Stuart Stanley, Matthew J. Dawson and C. Lovett Gill.
- OTTON: FRANK CHARLES, P.A.S.I. [Final]. 17 Colborne Way, Worcester Park, Surrey. Applying for nomination by the Council under the provisions of Byelaw 3 (d).
- PARSONS: WILLIAM MICHAEL TRACEY [Final]. Bawdrip, nr. Bridgwater, Somerset. Proposed by G. D. Gordon Hake, Mowbray A. Green and L. Stuart Stanley.
- PEGG: ALFRED LLOYD FRANK [Final]. 5 Lyndhurst Drive, Crossgate Moor, Durham City. Proposed by F. W. C. Gregory, H. M. Robinson and Norman Richley.
- PICKERING: JOSEPH WILLIAM [Final]. 914 Hessle High Road, Hull. Proposed by G. Dudley Harbron, Frederick J. Horth and H. Andrew.
- PICKFORD: ALFRED [Final]. 76 Kenilworth Avenue, South Harrow, Middlesex. Proposed by L. Stuart Stanley, James Burford and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- PICKMERE: RALPH ARNOLD [Final]. 20 Leinster Square, W.2. Proposed by G. Mackenzie Trench, E. W. Armstrong and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- PILKINGTON: THOMAS [Final]. Britannic Buildings, 25 Birley Street, Blackpool. Proposed by Major Halstead Best, Saml. Taylor and J. C. Robinson.
- PITCHFORD: ROY [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination]. 30 Row Cross Street, Old Kent Road, S.E. Proposed by W. S. Purchon, Owen H. Collins and William H. Hamlyn.
- PLAYER: HAROLD NEVILLE [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination]. "Bednellis," Bottrells Lane, Chalfont St. Giles, Bucks. Proposed by Joseph Addison, Stanley Hamp and Joseph Emberton.
- POLLARD: GEORGE WALTER [Final]. Leigh End, London Road, Datchet, Bucks. Proposed by Niel Martin-Kaye, W. H. Woodroffe, and C. Bouton Smith.
- PRITCHARD: MORRIS THOMAS [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination]. 6 Bowydd Road, Blaenau Ffestiniog. Proposed by Professor Lionel B. Budden, F. X. Velarde and J. E. Marshall.
- QUENNELL: R. PAUL [Passed five years' course at the Architectural Association. Exempted from Final Examination]. 18 Mecklenburgh Square, W.C.1. Proposed by Howard Robertson, and the President and Hon. Secretary of the Architectural Association under the provisions of Byelaw 3 (b).
- RAY: GILBERT [Final]. 3 Sycamore Crescent, Maidstone. Proposed by S. H. Loweth, John W. Little and Charles F. Callow.
- REAY: DONALD PATTERSON, B.Arch. [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination]. 20 The Oval, Wallasey, Cheshire. Proposed by Professor Lionel B. Budden, Edward R. F. Cole and Ernest Marshall.
- ROBIN: JAMES, Dip.Arch.(Glas.) [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination]. 13 Riverside Road, Newlands, Glasgow. Proposed by T. Harold Hughes, William J. Smith and John Stewart.
- SCOTT: GILBERT PRESTON, P.A.S.I. [Final]. 30 Sevenoaks Road, Orpington, Kent. Proposed by Ernest G. W. Souster, Lawrence A. D. Shiner and applying for nomination by the Council under the provisions of Byelaw 3 (d).
- SCOTT: MISS STELLA MARCIA, B.Sc.Hons.Architecture, Glasgow. [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination]. 72 Glennie Road, West Norwood, S.E.27. Proposed by T. Harold Hughes, Edwin Williams and L. Stuart Stanley.
- SEDDON: BRINNAND [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination]. Higher Whitley, Greenhill, Wigan, Lancs. Proposed by John Bradshaw Gass, Arthur J. Hope and James R. Adamson.
- SHANNON: JAMES JOHNSTONE [Final]. "Redsyke," Biggar, Lanarkshire. Proposed by A. Lorne Campbell, Jas. D. Cairns and T. Forbes MacLennan.
- SHORTALL: JOHN FRANCIS [Special Final Examination]. 3 Eaton Place, Monkstown, Co. Dublin. Proposed by L. Stuart Stanley, Professor R. M. Butler and John J. Robinson.
- SMALE: SIDNEY EVAN [Passed five years' course at the Architectural Association. Exempted from Final Examination]. 3 Westbourne Crescent, Lancaster Gate, W.2. Proposed by C. S. White, J. Murray Easton and L. H. Bucknell.
- SMITH: ALEXANDER JAMIESON [Final]. 6 Kennard Street, Falkirk. Proposed by T. Harold Hughes, L. Stuart Stanley and A. M. McMichael.
- SOUTHGATE: FREDERICK GEORGE [Special Final Examination]. 33 Royal Avenue, Lowestoft. Proposed by F. R. B. Haward, Stanley J. Wearing and Eric W. B. Scott.
- STEVENS: KENNETH ARTHUR [Final]. 278 Cowley Road, Oxford. Proposed by R. Fielding Dodd, Harold S. Rogers and Thomas Rayson.
- STOUT: GEORGE RUSSELL [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination]. Laurel Bank, Whitehaven. Proposed by Professor Lionel B. Budden, H. E. Scarborough and A. Huddart.
- STURROCK: FREDERICK GEORGE [Special Final Examination]. Myrtle Bank, Newburgh Road, Wormit, Fife. Proposed by Wm. Salmond, J. Donald Mills and Chas. G. Soutar.
- TAYLOR: JOHN PERCIVAL [Final]. 35 Strathmore Avenue, Hull. Proposed by G. Dudley Harbron, H. Andrew and L. Stuart Stanley.
- TIPPETTS: RUSSELL WARDLE [Final]. 22 The Close, Reservoir Road, Olton, near Birmingham. Proposed by John B. Surman, William T. Benslyn and L. Stuart Stanley.
- TURNER: FRANK ALBERT [Final]. 2 Acacia Close, Petts Wood, Kent. Proposed by F. Edward Jones, Joseph Addison and Edwin Williams.
- TURNER: FREDERICK JOHN WILLIAM [Final]. 177 Gleneldon Road, Streatham, S.W.16. Proposed by George Coles, Professor A. E. Richardson and George A. Mitchell.
- WALKER: FRED BUTTERWORTH, Dip.Arch.(Leeds). [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination]. Grosvenor Place, Luddendenfoot, Yorks. Applying for nomination by the Council under the provisions of Byelaw 3 (d).
- WALKER: PETER RUSSELL, A.A.Dip. [Passed five years' joint course at the Department of Architecture, Northern Polytechnic (London), and the Architectural Association. Exempted from Final Examination]. 20 Pinfold Road, Streatham, S.W.16. Proposed by H. S. Goodhart-Rendel and the President and Hon. Secretary of the Architectural Association under the provisions of Byelaw 3 (b).
- WALL: LIONEL WALTER DESMOND, Dip.Arch.Cardiff [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination]. 2 Rugby Road, Newport, Mon. Proposed by W. S. Purchon, Percy Thomas and Chas. F. Ward.
- WARD: RONALD [Final]. 33 St. George's Road, S.W.1. Proposed by A. Saxon Snell, Rees Phillips and L. W. Barnard.
- WEBSTER: HARRY [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination]. Park Hill, Wetherby, Yorks. Proposed by F. L. Charlton, W. F. Dawson and John C. Procter.



WHITAKER : GEORGE PATRICK GEOFFREY [Final]. 9 King's Bench Walk, The Temple, E.C.4. Proposed by L. Stuart Stanley, Kenneth Dalgliesh and Matthew J. Dawson.

WHITE : MYLES FREDERIC [Final]. "Bracken Dene," Jenny Becketts Lane, Mansfield. Proposed by L. Stuart Stanley and applying for nomination by the Council under the provisions of Byelaw 3 (d).

WILKINSON : JACK MULLINEAUX [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination]. 13 Lord Street, Brierfield, near Burnley, Lancs. Proposed by Saml. Taylor, Professor R. A. Cordingley and applying for nomination by the Council under the provisions of Byelaw 3 (d).

WILSON : ALEXANDER MILNE [Passed five years' course at the School of Architecture, Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination]. 37 Belvidere Street, Aberdeen. Proposed by James B. Nicol, R. Leslie Rollo and John G. Marr.

WINDLE : COLIN WILLIAM LEDGER [Passed five years' course at the Department of Architecture, University of Sheffield. Exempted from Final Examination]. 971 Ecclesall Road, Sheffield, 11. Proposed by Stephen Welsh, H. B. Leighton and H. B. S. Gibbs.

WOOD : BRIAN EMILE [Passed five years' joint course at the School of Architecture, University of Cambridge and the Architectural Association. Exempted from Final Examination]. "Ardath," Hastings Road, Bexhill-on-Sea, Sussex. Proposed by L. H. Bucknell, John Grey and J. Murray Easton.

WORMALD : RONALD DODD [Final]. 11 Beatrice Road, Norwich. Proposed by J. Forster, J. Nelson Meredith and J. A. Clarke.

WRIGHT : HAROLD MAURICE [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination]. "Woodstock," 22 Scott Road, Walsall, Staffs. Proposed by W. Alexander Harvey, William T. Benslyn and John B. Surman.

WRIGHT : JAMES [Passed five years' course at the Glasgow School of Architecture. Exempted from Final Examination]. 52 St. Meddans Street, Troon, Ayrshire. Proposed by T. Harold Hughes, William J. Smith and William Cowie.

WRIGHT : JOHN BERNARD [Passed five years' course at Leeds School of Architecture. Exempted from Final Examination]. 3 Rowfant Road, Balham, S.W.17. Proposed by Victor Bain, Joseph Addison and Fredk. R. Horns.

#### AS LICENTIATES (13)

ALLEN : RICHARD WILLIAM MARSH, 83 Powis Street, Woolwich, S.E.18; 26 Wrotesley Road, Plumstead, S.E.18. Proposed by Corney Newman, S. W. Ackroyd and W. F. Foster.

GRANT : ROBERTSON REID, c/o Middlesex County Council, 10 Great George Street, S.W.1; 34 Buxton Drive, New Malden, Surrey. Proposed by S. Gordon Jeeves, James J. S. Naylor and Sydney Clough.

HAMILTON : DONALD ST. AUBYN, 356 Oxford Street, W.1; Greyfriars, Cockfosters, Herts. Proposed by Albert E. Kingwell, Sydney Tatchell and F. E. Mennie.

HAMMOND : JOSEPH EVAN, 10 High Street, Romford; 45 Harrow Drive, Romford, Essex. Proposed by Thomas H. B. Scott, S. Phillips Dales and R. C. Foster.

HAMMOND : JOSEPH WILLIAM, 40 High Street, Romford; 45 Harrow Drive, Romford, Essex. Proposed by Thomas H. B. Scott, S. Phillips Dales and R. C. Foster.

HARRISON : JOHN BERTRAM LESLIE, c/o London County Council, Architects' Department, County Hall, S.E.1; "Thiepval," 72 Woodland Gardens, Isleworth, Middlesex. Proposed by W. T. Sadler, W. E. Brooks and Alfd. H. Barnes.

HARRISON : REGINALD JACK, 93 Park Lane, W.1; 32 Wordsworth Drive, Chisam, Surrey. Proposed by R. J. Hugh Minty, Ernest G. Cole and C. Harrold Norton.

HOBBS : JOHN HENRY AUSTEN, c/o Messrs. W. H. Smith & Son, Ltd., Estate Department, Strand House, W.C.2; 67 Loom Lane, Radlett, Herts. Proposed by F. C. Bayliss, W. Tweeds and C. Beresford Marshall.

JEFFCOTT : IAN, 20 Lower Regent Street, S.W.1, and New Carmelite House, E.C.4; "Oban," Balcombe Road, Horley, Surrey. Proposed by Joseph Emberton, G. Grey Wornum and E. Stanley Hall.

MILNES : FRED, P.A.S.I., c/o Architects' Department, Leeds Industrial Co-operative Society, Ltd., Leeds; The Rookery, Newlaithes Road, Horsforth, Leeds. Proposed by Wm. Broadbent and the President and Hon. Secretary of the West Yorkshire Society of Architects under the provisions of Byelaw 3 (a).

RIX : HOWARD TERRELL, High Street, Burnham, Bucks; Stanwell Cottage, Cox Green, Berks. Proposed by H. Edmund Mathews, G. Langley Taylor and applying for nomination by the Council under the provisions of Byelaw 3 (d).

SPENCE : JAMES WILLIAM, County Hall, Chelmsford; 111 London Road, Chelmsford, Essex. Proposed by John Stuart, Hugh R. Bird and Wykeham Chancellor.

WHYDALE : ARTHUR WILLIAM; "Wayside," Newmarket Road, Royston, Herts. Proposed by Chas. Saunders, J. A. Gutch and Charles Ridkey.

#### ELECTION OF STUDENTS R.I.B.A.

The following were elected as Students R.I.B.A. at the meeting of the Council held on 1 November 1937.

ATKINSON : GEORGE ANTHONY, Homeland, Gunton Cliff, Lowestoft. BIGGAR : ROBERT ALAN NIGEL, Le Clos du Ray, Mont Cochon, Jersey, C.I.

COULTON : RICHARD TREVENA, 4 Lawrie Park Crescent, Sydenham, S.E.26.

DENMAN : JOHN BLUET, 91 Guilford Street, Russell Square, London, W.C.1.

FOY : JOHN DORIC, 47 Chestnut Avenue, Walkden, Manchester. GREENING : GEORGE KENNETH, "Eighty," Harlaxton Drive, Nottingham.

HENDRY : JAMES FRANK WILLIAMSON, 7 Clairmont Gardens, Glasgow, C.3.

LOGAN : WILLIAM (JUN.), Kenilworth, Coatbridge, Lanarkshire. PORRI : ARTHUR PIERRE, 6 Ripplevale Grove, Barnsbury, N.1.

RHODES : GEORGE GODFREY, The White House, 93 Chalkwell Avenue, Westcliff, Essex.

RICHARDSON : GUY STEWART, Brook House, Tiptree, Essex. WALTERS : ROGER TALBOT, Kedings, Little Cornard, Sudbury, Suffolk.

#### R.I.B.A. PROBATIONERS

During the month of October 1937 the following were enrolled as Probationers of the Royal Institute :—

ALLEN : DOUGLAS NOEL, 46 Westbourne Park, Scarborough, Yorks.

BAMFORTH : PHILIP EWART BUXTON, 232 Wilbraham Road, Alexandra Park, Manchester, 16.

BENSON : BETTY CHRISTINE, Cream Cottage, Croft-on-Tees, Darlington.

BRYANT : PETER ANTHONY ELWOOD, 1 Cromer Road, Leeds, 2.

BURGESS : JOHN HARRY, 7 Priory Plain, Great Yarmouth, Norfolk.

BURTON-EMBLETON : HENRY VICTOR, 66 Hearnville Road, Balham, S.W.12.

CHUBB : BARBARA, The Drive, Ben Rhydding, Yorks.

COGGIN : DONALD ERIC, 2 Chillerton Road, Tooting Bec, S.W.17.

COGHLAN : PATRICK MILES FRANCIS, Almsford Bank, Harrogate.

COLLISTER : ERNEST ROY, Hilbré, Tabors Avenue, Great Baddow, Chelmsford, Essex.

COULTON : RICHARD TREVENA, 4 Lawrie Park Crescent, Sydenham, S.E.26.

CURRY : HAROLD WALTHEN, 280 Horbury Road, Lupset, Wakefield.

GRAY : ALFRED JOHN, Tame House, Reddish Vale, Reddish, near Stockport.



GUNDY : PETER BERTRAM HORACE, 38 Corringham Road, Barn Hill, Wembley Park, Middlesex.  
 HENDRY : JAMES FRANK WILLIAMSON, 7 Claitmont Gardens, Glasgow, C.3.  
 HORRON-DAVIES : RICHARD MARK FRANCIS, "Three Ways," Bear's Den, Kingswood Warren, Surrey.  
 HOWE : MICHAEL, Ascension Vicarage, Collier Row, Romford, Essex.  
 JOHNSON : BRIAN ROBERT, 7, Torrington Square, London, W.C.1.  
 KAYE : EDWARD BASIL, "The Nabb," Holmfirth, near Huddersfield, Yorks.  
 LAWRY : KENWYN CHARLES, 41 Westmount Road, Eltham, S.E.9.  
 LOCKETT : ARTHUR STEPHEN, 47 Windsor House, Wenlock Road, City Road, N.1.  
 LORING : FRANK DEREK, Brightlands, 125 Woodcote Road, Wallington, Surrey.  
 LUFF : DAPHNE HILDA CLARE, White Lodge, Addlestone, Surrey.  
 MACQUEEN : KENNETH GORDON, Clarence House, Rhyl, North Wales.  
 MAGUIRE : DESMOND JOSEPH, 69 Warrington Crescent, Maida Vale, W.9.  
 MALSON : BARRY WILLIAM COLE, 117 Saltergate, Chesterfield, Derbyshire.  
 MANGAN : RICHARD THOMAS, 153 St. Albans Road, St. Annes-on-Sea, Lancs.  
 MEIN : HENRY JAMESON, "Thorncroft," Alfreton Road, Sutton-in-Ashfield, NOTS.  
 MITCHELL : CYRIL JOHN, c/o Mrs. Walters, 58 New Park Street, Devizes, Wilts.  
 MORETON : JOHN BASIL ELIAS, 42 Jermyrn Street, Liverpool, 8.  
 ORNA : BERNARD JOSEPH FRANK, 76 Cholmley Gardens, N.W.6.

OWEN : ALICE ELIZABETH PAMELA, 13 Park Avenue, Hull, East Yorks.  
 PARNALL : ALAN GEACH, Nancernellian, St. Gennys, near Bude, North Cornwall.  
 PLANT : J. T., 26 Victoria Park Avenue, Leeds, 5.  
 POOLE : RALPH STANNARD, Queens Road, Earls Colne, Essex.  
 ROBERTON : RONALD JAMES, 5 Deanwood Avenue, Muirend, Glasgow, S.4.  
 ROBERTSHAW : JOSEPH ARNOLD, 30 Frimley Drive, Little Horton, Bradford, Yorks.  
 ROBINSON : MORRIS STRACHAN, 62 Morpeth Street, Hull, Yorks.  
 SHEPPERD : ARTHUR RONALD, "Waddon," First Avenue, Farlington, Hants.  
 SHERRIFF : DAVID, 5 Ascog Street, Glasgow, S.2.  
 SMITH : JEAN MARGARET VEITCH, "Annandale," 54 Adworth Road, Pontefract, Yorks.  
 STRANG : ALEXANDER, Randolph Farm, Falkirk.  
 TEARE : FREDERICK, 15 St. Annes Road East, St. Annes-on-Sea, Lancs.  
 TERRY : JOHN HANKINSON, The Lynch, Goodwick, Pembrokeshire.  
 TORRY : JOHN FREDERICK, 14 Seafield Crescent, Ayr, Scotland.  
 URE : GEORGE, "Burnbank," 80 Burnhead Road, Larbert.  
 WALKER : FRANK LEONARD, 11 Chestnut Avenue, Romford, Essex.  
 WALLACE : FREDERICK ALFRED, 93 Philip Lane, Tottenham, N.15.  
 WRIGHT : ARTHUR FRANCIS STEVENSON, Lawmill Cottage, 43 Byron Street, Dundee.

## Notices

SOCIAL EVENING, MONDAY, 6 DECEMBER 1937.  
 AT 8.30 P.M.

The R.I.B.A. Social Committee have arranged for the next R.I.B.A. Social Evening to take place on Monday, 6 December 1937, at 8.30 p.m., and it will take the form of a concert, arranged by the Music Group. The singer will be Miss Joyce Buckley (soprano), assisted by Miss Mary Armstrong (piano) and Miss Helen Barnett (flute). There will be no charge for admission and members of the R.I.B.A. are invited to bring their friends. Programmes will be on sale, and it is hoped that members who wish to support the concert will contribute more than the bare minimum.

THE R.I.B.A. LONDON ARCHITECTURE BRONZE MEDAL, 1937

The attention of members is drawn to the Form of Nomination and the conditions, subject to which the award will be made, for a building built within a radius of eight miles from Charing Cross during the three years ending 31 December 1937, issued separately with the current number of the JOURNAL. Any member of the Royal Institute is at liberty to nominate any building for consideration by the Jury.

Nominations should be sent to the Secretary R.I.B.A. not later than 28 February 1938.

R.I.B.A. ANNUAL DINNER 1938

The Annual Dinner will take place on Friday, 11 February 1938. Full particulars will be issued to members in due course.

BRITISH ARCHITECTS' CONFERENCE

BRISTOL, 22-25 JUNE 1938

The Annual Conference next year of the Royal Institute of British Architects and of its Allied and Associated Societies will take place at Bristol from 22 to 25 June 1938.

The Wessex Society of Architects have in hand the preparation of a most attractive programme and particulars will be issued in due course.

CHRISTMAS HOLIDAY LECTURES TO BOYS AND GIRLS

The eleventh series of informal talks on architecture to boys and girls will be given at the R.I.B.A. during the forthcoming Christmas holidays.

At the invitation of the Council Mr. G. A. Jellicoe [F.] has kindly consented to give the talks this year. They will be illustrated by lantern slides, and Mr. Jellicoe has chosen as his subject—

THE ENGLISH COUNTRYSIDE

1. *The Countryside of To-day*

The spiritual effect of landscape—Present standards of beauty and ugliness—Differences between "natural" and "man-made" landscape—Confusion of ideas causes spoliation—The dangers of sentiment—An analysis of the typical English countryside shows how, in the past, it has developed logically.

2. *The Countryside of the Past*

The growth of typical landscape out of primeval England—Systems of agriculture—How the "Enclosure" Acts gave the chequered pattern of fields—The work of the great landowners of the eighteenth century—The step by step development of an English industrial town from the countryside.

3. *The Countryside of the Future*

The causes of change—The probing of the earth's crust in search of minerals changes the landscape from agricultural to industrial—The effect of transport—The local countryside changes to a national countryside—

Poetry of the new landscape—Some visions of a future England—Planning England as a whole.

The lectures will be given in the Henry Jarvis Memorial Room, in the R.I.B.A. building at 66 Portland Place, W.1. on the following dates:—

Wednesday, 29 December 1937, at 3.30 p.m.

Friday, 31 December 1937, at 3.30 p.m.

Monday, 3 January 1938, at 3.30 p.m.

Tickets for any or all of the lectures may be obtained from the Secretary of the Royal Institute of British Architects, 66 Portland Place, London, W.1. The tickets are free.

Owing to the limited seating space of the hall, it is hoped that application will not be made for more tickets than can be used.

#### ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 7 February 1938 they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 11 December 1937.

#### LICENTIATES AND THE FELLOWSHIP

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (c), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

#### THE USE OF THE TITLES "CHARTERED ARCHITECT" AND "REGISTERED ARCHITECT"

Now that the Registration Act is in force the Council have been asked to give advice with regard to the best way to use the title "Registered Architect" by members of the R.I.B.A. who have been placed on the Register, and who already have the right to use the designation "Chartered Architect."

The Council recommend that members of the R.I.B.A. who have been registered should use the designation "Chartered and Registered Architect."

#### NEW BUILDING MATERIALS AND PREPARATIONS

The Science Standing Committee wish to draw attention to the fact that information in the records of the Building Research Station, Garston, Watford, is freely available to any member of the architectural profession, and suggest that architects would be well advised, when considering the use of new materials and preparations of which they have had no previous experience, to apply to the Director for any information he can impart regarding their properties and application.

#### THE NATIONAL ASSOCIATION OF WATER USERS

Members are reminded that the National Association of Water Users, on which the R.I.B.A. is represented, exists for the purpose of protecting the interests of consumers.

Members who experience difficulties with water companies, etc., in connection with fittings are recommended to seek the advice of the Association. The address of the Association is 46 Cannon Street, London, E.C.4.

#### OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

## Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

#### PROPOSED COMPETITION FOR DESIGN FOR A BATHING STATION, HORNSEY U.D.C.

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

#### PROPOSED COMPETITION FOR ALTERATIONS AND IMPROVEMENTS TO EBBW VALE CONSERVATIVE CLUB PREMISES

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

#### DUNDEE: DUNCAN OF JORDANSTONE COLLEGE OF ART

The Governors of the Dundee Institute of Art and Technology invite architects of British nationality domiciled in the United Kingdom to submit in competition designs for the Duncan of Jordanstone College of Art proposed to be erected on a site in Perth Road, Dundee.

Assessor: Mr. Julian R. Leathart [F.].

Premiums: £500, £250 and £150.

Last day for submitting designs: 6 May 1938.

Last day for questions: 19 January 1938.

Conditions of the competition may be obtained on application to the Clerk and Treasurer, Dundee Institute of Art and Technology, Bell Street, Dundee, Angus. Deposit £1 15s.

#### KEIGHLEY: NEW SENIOR MIXED SCHOOL

The Keighley Education Authority invite architects to submit, in competition, designs for a New Senior Mixed School, proposed to be erected on the Guard House Site, Keighley, Yorkshire.

Assessor: Mr. Harold A. Dod, M.A. [F.].

Premiums : 150 guineas, 100 guineas, 50 guineas.

Last day for submitting designs : 22 December 1937.

Last day for questions : 4 September 1937.

Conditions of the competition may be obtained on application to Mr. E. Ratcliffe, Director of Education, Education Office, Keighley, Yorks. Deposit £2 2s.

#### REDCAR : THE DEVELOPMENT OF THE "STRAY"

The Corporation of Redcar, Yorks, invite architects to submit in competition designs for the layout of, and buildings to be erected on, the "Stray" at the front of Zetland Park, Redcar.

Assessor : Professor Patrick Abercrombie [*V.-P.R.I.B.A.*]

Premiums : £250, £100, and £50.

Last day for submitting designs : 28 February 1938.

Last day for questions : 31 December 1937.

Conditions of the competition may be obtained on application to the Town Clerk, Municipal Buildings, Redcar, Yorks. Deposit £1 1s.

#### ROYAL NATIONAL EISTEDDFOD OF WALES, CARDIFF, 1938 : ARCHITECTURAL COMPETITIONS

The Royal National Eisteddfod of Wales are promoting the following two competitions :

- (1) For a design for a scheme comprising Physical Culture Centre and Baths. Premiums : £60, £30 and £20.
- (2) For a design for a Group of Twelve Dwellings for Aged People. Premiums : £30 and £20.

The Assessor for the competitions is Mr. Percy E. Thomas, O.B.E., Hon. LL.D., Past-President R.I.B.A.

Particulars of the competitions may be obtained on application to The General Secretary, Royal National Eisteddfod of Wales, 11 Park Place, Cardiff.

#### ST. GEORGE'S HOSPITAL : RECONSTRUCTION

The President, Vice-President, Treasurer and Governors of St. George's Hospital invite architects practising in the United Kingdom and Northern Ireland to submit in competition designs for the reconstruction of St. George's Hospital, Hyde Park Corner.

Assessors : Dr. H. V. Lanchester [*F.*].

Mr. T. A. Lodge [*F.*].

Premiums : £500, £300 and £200.

Owing to an unavoidable delay in the issuing of the conditions, the last dates for the submission of designs and questions will be extended, in order that the same period for the preparation of designs will be available as was originally intended.

Conditions of the competition will be obtainable shortly on application to The House Governor, St. George's Hospital, Hyde Park Corner, London, S.W.1. Deposit £2 2s.

#### ESSAY COMPETITION : "THE FUTURE AND THE ARCHITECTURAL ASSISTANT"

The A.A.S.T.A. is promoting an Essay Competition open to any assistant in an architectural office or any student taking an architectural course on the subject "The Future and the Architectural Assistant."

Assessors : Professor C. H. Reilly, O.B.E. [*F.*].

Mr. H. de C. Hastings, Editor of the *Architectural Review*.

Mr. F. J. Maynard [*A.*], President A.A.S.T.A.

Prizes : £20, £10 and £5.

Closing date : 5 January 1938.

Full particulars may be obtained on application to The Secretary A.A.S.T.A., 113 High Holborn, London, W.C.1.

#### COMPETITION FOR A POSTER HOARDING

The Yorkshire and Northern Poster Advertising Association invite architects in practice or in training within the area of the West Yorkshire Society of Architects, York and East Yorkshire Society of Architects, Sheffield, South Yorkshire and District Society of Architects and Surveyors, and the Northern Architectural Association to submit in competition designs for a Poster Hoarding which can be erected in large or small towns and will fit in with its surroundings.

Assessors : Sir Enoch Hill (Chairman).

Mr. S. W. Milburn, M.C. [*F.*].

Mr. J. C. Amory Teather [*F.*].

Mr. C. W. C. Milburn [*F.*].

Mr. Norval R. Paxton [*A.*].

Mr. Cyril Sheldon.

Mr. Arthur Taylor.

Premiums : £50, £30 and £20.

Last day for submitting designs : 31 March 1938.

Conditions of the competition may be obtained on application to the Hon. Secretary of any of the R.I.B.A. Allied Societies mentioned above.

#### FORTHCOMING COMPETITIONS

Other competitions which it is proposed to hold, and the conditions for which are not yet available, are as follows :—

##### BRIERLEY HILL, STAFFS. : NEW MUNICIPAL BUILDINGS

Assessor : Mr. Verner O. Rees [*F.*].

##### CHESTER : EXTENSIONS TO CHESTER ROYAL INFIRMARY

Assessor : Mr. Arthur J. Hope [*F.*].

##### EDMONTON : NEW TOWN HALL BUILDINGS

Assessor : Mr. E. Berry Webber [*A.*].

##### GLOUCESTER : NEW SWIMMING BATH AND FIRE STATION

Assessor : Mr. C. F. W. Denning, R.W.A. [*F.*].

##### PRESTWICH : NEW MUNICIPAL BUILDINGS

Assessor : Mr. T. C. Howitt, D.S.O. [*F.*].

##### SOUTH SHIELDS : ASSEMBLY HALL AND LIBRARY

Assessor : Mr. Arthur J. Hope [*F.*].

##### WOOD GREEN : NEW MUNICIPAL OFFICES AND COURTS

Assessors : Messrs. C. H. James [*F.*] and S. Rowland Pierce [*A.*].

##### WREXHAM : NEW TOWN HALL

Assessor : Mr. Herbert J. Rowse [*F.*].

##### YEOVIL : NEW TOWN HALL

Assessor : Mr. C. Cowles-Voysey [*F.*].

## MEMBERS' COLUMN

*Owing to limitation of space, notices in this column are restricted to changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and appointments vacant. Members are reminded that a column in the Advertisement Section of the Journal is reserved for the advertisements of members seeking appointments in architects' offices. No charge is made for such insertions and the privilege is confined to members who are definitely unemployed.*

### PARTNERSHIP WANTED

A.R.I.B.A., A.A.Dipl. (36), in practice 10 years, wants partnership with well-established architect. Some work in hand and some capital available.—Box 5117, c/o Secretary R.I.B.A.

### PARTNER WANTED

LONDON architect, 30 years' practice in London, seeks assistant prepared to take over practice or acquire partnership.—Reply Box No. 4117, c/o Secretary R.I.B.A.

### NEW PARTNERSHIPS

MR. A. E. EBERLIN, M.C. [I.], has taken into partnership his chief assistant, Mr. Leslie Darbyshire [I.], Chartered and Registered Architect. The business, which was formerly known as Baily & Eberlin, will be carried on at 3 College Street, Nottingham, under the style of Eberlin & Darbyshire.

MR. S. L. BLACKBURN [F.] has taken into partnership Mr. G. Norburn [I.], and the practice will be continued under the title "Blackburne and Norburn" at Union Building, P.O. Box 890, Nairobi, Kenya Colony.

### RETIREMENT FROM PRACTICE

AFTER 43 years in practice, Mr. G. E. Nield [F.] has now retired from the firm of Messrs. G. E. Nield & Son, which will be carried on by the remaining partner, Mr. Denzil Nield.

### CHANGES OF ADDRESS

MR. HARRY SIRR [F.] has moved to Mill Lane Bungalow, Benhall Green, Saxmundham, Suffolk.

MESSRS. CURWEN & CALDWELL have changed their address to 2a Market Place, Kendal. Telephone: 79.

MR. F. R. PULLAN [I.] has changed his address to 29 Heathfield Gardens, London, N.W.11.

MR. S. B. PRITLOVE [I.] has changed his address to 37 Great Pulteney Street, W.1. Telephone number as before: Gerrard 6777.

MR. E. KEITH MACKAY [I.] has returned to Australia and is now associated with Mr. Leslie M. Perrott [F.] at Temple Court, Collins Street, Melbourne.

MESSRS. MOORE & HUNTER [I.] have moved to Walton House, 1 Newman Street, Oxford Street, London, W.1. Telephone: Museum 0526 (2 lines). They would be glad to receive trade catalogues.

### ASSISTANCE OFFERED

ARCHITECT [F.] is open to render assistance on jobs or competitions in own office or otherwise. Winner of three competitions and several premiums. Perspectives undertaken. Apply "N." 14 Bedford Row, W.C.1.

## Architects' and Surveyors' Approved Society

### ARCHITECTS' ASSISTANTS' INSURANCE FOR THE NATIONAL HEALTH AND PENSIONS ACTS

Architects' Assistants are advised to apply for the prospectus of the Architects' and Surveyors' Approved Society, which may be obtained from the Secretary of the Society, 113 High Holborn, London, W.C.1.

The Society deals with questions of insurability for the National Health and Pensions Acts (for England) under which, in general, those employed at remuneration not exceeding £250 per annum are compulsorily insurable.

In addition to the usual sickness, disablement and maternity benefits, the Society makes grants towards the cost of dental or optical treatment (including provision of spectacles).

No membership fee is payable beyond the normal Health and Pensions Insurance contribution.

The R.I.B.A. has representatives on the Committee of Management, and insured Assistants joining the Society can rely on prompt and sympathetic settlement of claims.

## A.B.S. Insurance Department

### THE ARCHITECTS' SPECIAL MOTOR CAR INSURANCE AT LLOYD'S

In conjunction with a firm of Lloyd's Insurance Brokers the Architects' Benevolent Society's Insurance Committee have devised a Special Motor Car Policy for Architects. This policy and the special advantages to be gained from it are available only to members of the Royal Institute of British Architects and its Allied and Associated Societies.

Special features include:—

1. Agreed values for all cars payable at any time in the event of a total loss.

2. A cumulative no-claim bonus from 20 per cent., rising to 33½ per cent. in the third year.

3. No extra premium for business use of car owned by individuals.

4. Prompt claims service in every part of Great Britain; repair carried out by any garage provided estimate is forwarded immediately.

SPECIMEN RATES FOR FULL COMPREHENSIVE POLICIES ARE GIVEN BELOW. OTHER RATES QUOTED ON APPLICATION

		Premium.
		£ s. d.
7 h.p. Austin, valued at £100	.. ..	8 5 0
9 h.p. Standard, valued at £100	.. ..	9 0 0
11 h.p. Morris, valued at £150	.. ..	9 15 0
20 h.p. Hillman, valued at £300	.. ..	13 7 0

(The rates shown do not apply to cars garaged in London and Glasgow and Lancashire manufacturing towns; rates for these areas will be quoted on application.)

All enquiries with regard to the Special Motor Car Policy for Architects should be sent to the Secretary, A.B.S. Insurance Department, 66 Portland Place, W.1.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

Members sending remittances by postal order for subscriptions of Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A. and crossed.

Members wishing to contribute notices or correspondence must send them addressed to the Editor not later than the Tuesday prior to the date of publication.

### R.I.B.A. JOURNAL

DATES OF PUBLICATION.—1937.—6, 20 December. 1938.—10, 24 January; 7, 21 February; 7, 21 March; 11, 25 April; 9, 23 May; 13, 27 June; 18 July; 15 August; 12 September; 17 October.

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